Ministry of
Advanced Education

2004/05
Annual Service Plan Report

BRITISH
COLUMBIA

www.gov.bc.ca

National Library of Canada Cataloguing in Publication Data
British Columbia. Ministry of Advanced Education.
Annual Service Plan Report. — 2002/03 –

Annual.
Also available on the Internet.
Continues: British Columbia. Ministry of Advanced Education. Annual Report.
ISSN 1703-3594.
ISSN 1705-8872 = Annual service plan report — British Columbia. Ministry of Advanced Education

1. British Columbia. Ministry of Advanced Education — Periodicals. 2. Postsecondary education — British Columbia — Periodicals. 3. Postsecondary education — Government policy — British Columbia — Periodicals. 4. Technical education — British Columbia — Periodicals. 5. Technical education — Government policy — British Columbia — Periodicals. I. Title. II. Title: Ministry of Advanced Education... Annual Service Plan Report.

LC176.2.B7B74 353.8'8'0971105 C2003-960099-8

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Published by the Ministry of Advanced Education
2353-2

* *Refer to note on page 3.*

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PLEASE NOTE: On June 16, 2005, the government ministries were re-organized to reflect the new cabinet responsibilities. Many of the website addresses and links in this printed report may have changed following the government re-organization.

- A list of the new ministries is available on the government website at http://www.gov.bc.ca — follow the links to Ministries and Organizations.
- An index of all 2004/05 Annual Service Plan Reports, with up-to-date website links, is available online at http://www.bcbudget.gov.bc.ca/annualreports/ .

Message from the Minister and Accountability Statement

It is an honour to present the 2004/05 Annual Service Plan Report for the Ministry of Advanced Education.

Our 2004/05 – 2006/07 service plan outlined an ambitious agenda with challenging targets. Although I have only been the Minister of Advanced Education for a short time, I am pleased to say on behalf of the ministry and our post-secondary partners that we are proud of our achievements over the past year. These achievements are recounted in detail on the pages that follow.

We have accomplished a great deal, but we still have much to do. We have only just begun the largest expansion of the public post-secondary system in 40 years, an expansion that will improve the existing infrastructure and add 25,000 more student spaces by 2010. We are also launching a range of strategies to increase literacy in the province as part of government's goal of making British Columbia the most literate jurisdiction by 2010. Additionally, we will continue increasing opportunities for students to train in high demand fields such as nursing, medicine, skilled trades and engineering. We are encouraging further growth and cooperation in post-secondary research, building on our reputation as a world class research centre. We will continue working to fairly balance education costs among government, institutions and students while ensuring affordable access to post-secondary education. And we will persist in our efforts to expand the education choices available to students across the province.

The 2004/05 Ministry of Advanced Education's Annual Service Plan Report compares the actual results to the expected results identified in the ministry's 2004/05 Service Plan. I am accountable for those results as reported.

Ida Chong

Honourable Ida Chong
Minister of Advanced Education

June 14, 2005

106-00482/

Highlights of the Year

The following is an overview of major developments and achievements in British Columbia's post-secondary system in 2004/05:

- Improved student access by increasing system capacity through the first stage of an ambitious plan that will see 25,000 student spaces added to the public post-secondary system by 2010.
- Increased student spaces and opportunities for students to train in strategic skill programs such as nursing, medicine, engineering and skilled trades.
- Introduced the B.C. Loan Reduction Program to ease financial barriers facing post-secondary students.
- Doubled the funding for the adult literacy cost-shared program from $700,000 to $1.4 million as part of a new strategy to make British Columbia the most literate jurisdiction in North America by 2010 and beyond.
- Provided support and helped identify priorities for the Premier's Advisory Panel on Literacy and the November 2004 Premier's Literacy Summit.
- Increased education choices available to students through a new degree quality assessment process, which expands the range of degree programs offered in the province and provides consumer protection for students enrolled in private post-secondary degree programs.
- Worked with employers and educators to improve student employability and meet labour market demand in fields such as aerospace, oil and gas, and hospitality and tourism.
- Boosted participation in industry training through the new Industry Training Authority, which was established in 2004 to expand and improve B.C.'s industry training system.
- Improved opportunities for students to study in their home communities by expanding online learning, increasing spaces at existing institutions across the province, and by establishing the new Thompson Rivers University, the University of British Columbia Okanagan and Okanagan College.
- Continued to bolster research capacity at B.C. public post-secondary institutions through direct and leveraged funding for research projects and capital financing for construction and renovations of research facilities.
- Enhanced accountability in the public post-secondary system under the Accountability Framework as the first annual three-year service plans were issued by B.C. public post-secondary institutions.
- Eased B.C. student loan repayment options with the introduction of online and telephone banking.
- Supported efforts to help Aboriginal students access and complete post-secondary programs through a range of projects under the Aboriginal Special Projects Fund.

Ministry Role and Services

Ministry Overview

British Columbia's post-secondary education system is a pillar of our province's social and economic strength. It provides students with education and training that communities, employers and entrepreneurs need, and it conducts research that fosters discovery, innovation and the creation of knowledge.

The work that yields these benefits is done by public and private post-secondary education institutions and organizations. Leading, coordinating and supporting this work is the role of the Ministry of Advanced Education. More specifically, post-secondary institutions develop and deliver programs and courses, provide education and training to students, undertake research, and serve their communities. The ministry provides leadership and direction, establishes policy and accountability, and provides funding through operating grants to public institutions as well as contributions toward capital projects and financial assistance to students.

Among the ministry's responsibilities identified above, only the last one — student financial assistance, which provides loans and grants to eligible students for education and living costs — is a service that the ministry delivers directly to British Columbians. The BC Student Assistance Program (BCSAP) is a needs-based program created to help eligible students with the costs of post-secondary studies while enrolled at public and designated private institutions. The ministry also administers student loan and grant programs on behalf of the federal government, the Canada Millennium Scholarship Foundation and other ministries and agencies.

Aside from student financial assistance, all other public services for which the ministry is responsible are delivered by post-secondary institutions and organizations. Public post-secondary institutions in British Columbia, like those in other provinces, have a significant and appropriate degree of autonomy from government in many areas. This autonomy affords institutions the necessary independence to determine how to best meet the needs of their students, their communities, and the province.

The balance between institutional autonomy on the one hand and the need to address government's post-secondary priorities while ensuring accountability for public funds on the other is maintained through funding arrangements and reporting requirements that emphasize outcomes-oriented service delivery targets. The ministry consults with public institutions to ensure that targets are reasonable while reflecting government's priorities. These are communicated to institutions in annual budget and accountability letters outlining service delivery and outcomes targets and the funding the ministry will provide. Public institutions allocate ministry funding as they deem necessary to meet their targets, and they provide the ministry with information necessary to ensure accountability for outcomes,

public funding and research. Institutions also issue annual three-year service plans to inform the public of their goals, objectives, measures and targets, and annual reports to inform the public of the outcomes they achieved.

The internal and external governance and accountability structures for most public post-secondary institutions are set out in legislation: the *University Act*, the *College and Institute Act*, the *Royal Roads University Act*, and the *Thompson Rivers University Act*. Each act provides for a board of governors with responsibility for operational and financial matters, and for academic governance structures with responsibility for decisions and advice concerning academic matters including credentials, curriculum and academic standards.

In addition to public post-secondary institutions, British Columbia also has a diverse private post-secondary sector that offers a range of education and training programs. Unlike their public counterparts, private post-secondary institutions are not directly funded by the ministry. However, private degree and career training institutions are subject to legislative and regulatory frameworks including the *Degree Authorization Act* and the *Private Career Training Institutions Act* respectively. These frameworks address education standards and provide consumer protection for students enrolled in private degree and career training institutions. In addition, BCSAP policies ensure that publicly-funded student financial assistance is available only for students enrolled in those private post-secondary programs that are deemed eligible.

Industry training in British Columbia is overseen by the Industry Training Authority (ITA), a Crown agency that governs an industry-led system capable of responding to the immediate and long-term needs of employers and trainees in all regions of the province. The classroom portions of industry training programs are delivered by both public and private institutions. The ITA works with institutions and industry to increase the quality and quantity of training in the province, and to ensure that training standards are current. The ITA provides services to trainees and apprentices including registrations, coordinating examinations and issuing certifications, and has the lead role in promoting industry training in the province.

The ITA is governed by a board of directors whose members are appointed by the minister and are drawn from diverse sectoral backgrounds. The ITA's governance relationships and accountabilities are set out in the *Industry Training Authority Act*, the *Budget Transparency and Accountability Act*, the *Financial Information Act* and the *Financial Administration Act*. Further accountability is outlined in an annual budget and accountability letter and in a shareholder's letter of expectations between the minister and the board chair. The ITA is required to submit a service plan and report to government in accordance with the financial reporting calendar and performance reporting requirements set out for publicly-funded agencies.

Ministry Vision, Mission and Values

Vision

The Ministry of Advanced Education envisions a province where all British Columbians have affordable access to the best possible, technologically advanced, integrated and accountable post-secondary education system.

Mission

The Ministry of Advanced Education provides leadership and support for a top-notch advanced education and training system that provides all British Columbians with opportunities to develop the skills and knowledge they need to participate fully in the economic, social and cultural life of the province.

Values

The following values guide the ministry in its work:

- **A student-centred post-secondary education system:** Student assessments of aspects such as the quality of education they received form an important part of the monitoring of the system, and is information that is readily available publicly (see: http://www.aved.gov.bc.ca/accountability/student.htm*).
- **Excellence, innovation and continuous improvement:** An Accountability Framework is one of the tools in place to assess the performance of the public post-secondary system and is reviewed periodically to ensure it leads to improvement. The role of university-based research leading to innovation in economic development forms an important part of this report.
- **Relevance and responsiveness of the post-secondary education system:** The ministry gathers and analyzes labour market, demographic, demand and other socially or economically relevant information to guide planning and delivering an appropriate range of education and training programs in the public post-secondary system.
- **Recognition of the key role post-secondary education, skills training, research and development play in a successful economy:** Outcomes of both educational programs and research conducted at post-secondary institutions are monitored.
- **Life-long learning opportunities for all British Columbians:** The ministry and the post-secondary institutions are committed to increasing accessibility to post-secondary education.
- **A positive and supportive working environment:** Employee morale and motivation is strengthened through Employee Performance and Development Planning, a collaborative process to identify and review personal work goals and learning opportunities.
- **Effective working partnerships:** The relationships between the ministry and the post-secondary institutions exhibit both enhanced public accountability and recognition of institutional autonomy.
- **Greater equity and equality for British Columbians:** The public post-secondary system is committed to increased access for under-represented groups.

* *Refer to note on page 3.*

- **Results-based accountability:** The Accountability Framework for British Columbia's Public Post-Secondary Education System organizes and guides the processes necessary to demonstrate accountability to the legislature and to the public.
- **Fiscal responsibility:** Public post-secondary institutions are not permitted to incur accumulated deficits. The ministry has appropriate financial management procedures.

Ministry Core Business Areas

The work of the ministry is encompassed by the following five core business areas.

1. Educational Institutions and Organizations

The ministry provides funding to British Columbia's public universities, university colleges, community colleges, institutes, and other organizations that support the province's public post-secondary education system.

2. Industry Training and Apprenticeship

The ministry provides funding to the Industry Training Authority (ITA), which oversees the industry training system in British Columbia. The ITA works with industry and the post-secondary education system to meet the needs of industry and learners.

3. Student Financial Assistance

Student financial assistance is available to students at the post-secondary level attending public and designated private institutions. It combines repayable loans, non-repayable assistance, and debt reduction measures awarded on the basis of each student's need. It also provides merit-based awards. In addition, the ministry administers student aid programs on behalf of the federal government, the Canada Millennium Scholarship Foundation, and other British Columbia ministries.

4. Debt Service Costs and Amortization of Prepaid Capital Advances

The ministry provides funding to public post-secondary institutions to finance capital projects, including upgrades, renovations, replacements, expansions, and new facilities and equipment. It services the debt associated with these projects and amortizes the resulting assets over their economic lives.

5. Executive and Support Services

The ministry provides leadership, establishes policy, and administers accountability and planning processes for British Columbia's public post-secondary education system. The ministry also establishes policy concerning private post-secondary institutions, and supports the Degree Quality Assessment Board, which administers a quality assessment process for new public and private degree programs. Support to the ministry in the areas of human resources, information systems, records management, financial management, and information privacy is provided by the Management Services Division, whose budget is reported by the Ministry of Education.

Ministry Operating Context

This section of the report reviews the major trends and resulting challenges and opportunities that influence the post-secondary education system and industry training sectors. The long-term trends, challenges and opportunities identified in the 2004/05 – 2006/07 service plan continue to be relevant and to influence planning decisions. These trends include the increase in demand for post-secondary education and industry training, the increased diversity of British Columbia's population, and continuing technological advancements. Post-secondary providers have been and continue to be challenged to utilize technology, provide greater flexibility in education-related services, and develop relevant programs.

Demographics

Growing population and demand for post-secondary education

In recent years, British Columbia's annual population growth has been close to the growth rate of Canada, and has shown signs of overtaking the national average. In 2004, Statistics Canada estimated that B.C.'s population grew by 1.1 per cent over 2003, compared to 0.9 per cent for the Canadian population over the same period.

International immigration accounted for the bulk of B.C.'s population gains over the past few years and is expected to increase into the future, remaining the largest contributor to overall population growth in the province. Inter-provincial migration has also contributed a considerable share of the total population growth, and is projected to increase, due largely to a strong provincial economy.

The 18-29 year age group (the primary post-secondary cohort) grew faster than total population in the past year, and will continue to do so over the next decade. In 2004, the 18-29 year age group grew an estimated 1.7 per cent over the year, compared to 0.9 per cent for the total population.

Challenges and opportunities

Growth in the 18-29 year age group and increasing participation rates, as well as more adult learners, have increased demand for post-secondary education and training and student financial aid. This increase is expected to continue, intensifying pressure for more choice in the range of education and industry training options within the context of public sector fiscal constraints.

The increasing number of people migrating to B.C. includes a significant proportion of new immigrants who possess at least a baccalaureate level of education. These also include many whose first language is not English. This trend towards an increasingly diversified population is expected to continue, and will likely increase demand for English as a Second Language programs.

The Changing Economy, Learning and Labour Market Environments

Signs of a solid economic recovery

In 2004, for the first time since 1987, B.C. led all the other provinces in economic growth. The provincial economy performed well as it expanded by 3.9 per cent in 2004, compared to 2.5 per cent in 2003.

Although the aging of B.C.'s workforce continued to be a dominant demographic trend, an attractive job market has contributed to an increase in the 15–24 and 25–44 year-old age groups in the labour market. In 2004, there was a net increase of 28,700 workers to the labour force over the year, of which 9,000 (31.4 per cent) were aged 15–44 years. In contrast, in 2003, there was a net increase of 46,700 workers in the labour force, but new workers aged 15–44 years declined by 700 (1.5 per cent).[1]

As the provincial unemployment rate continued to decline and some sectors of the economy operated at historically high levels, B.C. experienced labour market pressures in some occupations and in some locations of the province. Shortages were identified in certain high-skilled fields, including health care professions, particularly in rural and northern communities. In addition, there were also shortages identified in some construction trades, particularly in the Lower Mainland and Southern Vancouver Island.

Increased educational requirements for employment

Increasingly, post-secondary education or industry training beyond a high school level is a prerequisite for employment as the province's economy becomes more reliant on the high-technology and knowledge sectors.

Generally, British Columbians, including young people, are well-educated and highly skilled. Enrolment in B.C. public post-secondary institutions as a proportion of the 18–29 year-old population in the province was estimated at 43.9 per cent in 2003/04. According to the most recent data available from Statistics Canada (1999/00), B.C. had the third highest participation rate in the country. Over the past year, employers recruiting for some occupations in the health care, high-tech and trades fields experienced competition for skilled workers, which is expected to continue. This competition can vary by specializations within occupations and by region.

Challenges and opportunities

The post-secondary education system must continue to adapt to the needs of an evolving labour market. This will require strong ties with community, regional and provincial stakeholders to ensure the system reflects the skills needs of local communities and economics as well as provincial priorities. Together with our post-secondary partners, the ministry has been expanding opportunities for students to pursue occupations in high-demand fields such as nursing, medicine, skilled trades, engineering, and industry training. This is being done by increasing the capacity of the post-secondary system and by targeting

[1] Statistics Canada Labour Force Historical Review 2004.

bursaries and student loan forgiveness where demand is greatest. The Industry Training Authority is also working to increase the number of people entering skilled trades by encouraging more youth to enter the trades through programs such as the Accelerated Credit Enrolment in Industry Training (ACE IT) program, and by providing additional options to pursue longer-term training and broader credentials, and to ladder or bridge to new career options over time.

New Era Commitments

On June 25, 2001, the Premier wrote to all cabinet ministers and identified specific *New Era* commitments for which they would be directly responsible. The *New Era* commitments specific to the Ministry of Advanced Education that were outstanding at the beginning of 2004/05 are identified below. Some are anticipated to be fulfilled in the near future; others involve ongoing routines or processes.

***New Era* Commitment**	**Current Status**
Double annual number of graduates in computer science and electrical and computer engineering, within five years.	The ministry has targeted funding to increase the number of student FTEs[1] in these programs each year since 2001. In 2004/05, the ministry targeted 7,144 FTEs, up from 4,659 in 2001/02. Utilization rates have been below 100 per cent due to low student demand caused by labour market fluctuations in the technology sector in recent years. British Columbia is expected to see robust growth in the industry in the coming years and this will no doubt be reflected in increased utilization rates for these programs in the future. Ministry staff are working with participating institutions to track the increased number of graduates that will result from the growth in seats.
Strengthen our network of colleges, institutes and online learning throughout the province.	In October 2002, the ministry announced the creation of BCcampus, an initiative to co-ordinate distance and online education programs involving all B.C. public post-secondary institutions. In 2004, the ministry announced the creation of Thompson Rivers University, a special purpose university created through a merger of the Open College and Open University with University College of the Cariboo. Also in 2004, the ministry announced the creation of Okanagan College and the University of British Columbia Okanagan. These new institutions will be officially established in 2005/06, fulfilling this *New Era* commitment.

[1] Student FTEs represent all full-time and part-time enrolments converted to the number of students carrying a 'normal' full-time course load. One student whose course load is equal to the normal full-time number of credits/units or student contact hours required in a year for normal progression in a credential program would be 1.0 student FTE. For most general degree programs, one FTE represents 15 units or 30 credits per year (10 courses a year).

New Era Commitment	Current Status
With the Ministry of Children and Family Development	
Train more social workers to meet the critical skills shortages.	The ministry has targeted funding to increase the number of student FTEs in social/child protection worker programs each year since 2002/03. The commitment to train more social workers will be fulfilled in 2005/06 with 1,050 student FTEs in these programs, up from a baseline of 976 in 2001/02, thereby addressing any potential skills shortages in this area.
With the Ministry of Skills Development and Labour	
Work with employers, post-secondary institutions and the Industry Training and Apprenticeship Commission to increase training and apprenticeships in trades and technical sectors.	The ministry has replaced the Industry Training and Apprenticeship Commission with the new Industry Training Authority (ITA) and has introduced a new industry-training model to address shortages in skilled trades and technical sectors around the province. The minister has tasked the ITA with increasing the number of trainees and apprentices in industry training programs by 30 per cent by 2006/07.
With the Ministry of Health Services	
Expand training programs for care aides, licensed practical nurses and registered nurses in collaboration with our universities, colleges and institutes.	In August 2001, the ministry announced a $21 million strategy to provide additional education and training opportunities for nurses and health care professionals. In each fiscal year since, the ministry has targeted increases in the number of student FTEs in these programs. In 2004/05, the ministry targeted 10,914 FTEs, up from 8,393 in 2001/02. Further annual increases are planned through to 2007/08.
Increase the number of medical school graduates over next five years.	In 2002, government announced a plan to almost double the number of medical school graduates through a new collaborative model of physician education involving University of British Columbia (UBC), University of Northern British Columbia (UNBC) and University of Victoria (UVic). In 2004/05, new facilities at UBC, UNBC and UVic supporting the expansion and funded by the ministry were officially opened. The first students under this major expansion were admitted in fall 2004, and the first graduates are anticipated in 2007/08.

New Era Commitment	Current Status
With the Ministry of Health Services	
Develop a 10-year human resource plan that properly provides for the training, recruitment and retention of physicians, nurses, specialists and other health care providers in every area of the province and that addresses critical skills shortages and staffing levels in under-serviced areas.	The ministry continues to participate in the development of a 10-year health human resource plan, led by the Ministry of Health Services. For future years, the ministry will continue to support the Ministry of Health Services and ensure that expansion of health programs in the public post-secondary system is closely aligned with the overall 10-year health human resource plan. As part of the 2004 First Ministers' Ten-Year Plan to Strengthen Health Care, B.C. is participating in developing and publishing a health care human resource action plan by December 2005.

Report on Performance

Overview of Ministry Goals and Linkage to Government Strategic Goals

The Government of British Columbia Strategic Plan informs the public, the legislature and the public service of government's long-term vision. For individual ministries, the strategic plan is the guiding document for our service plans. It outlines the Province's central goals from which ministries derive their own goals and objectives relevant to their core business areas. In doing so, the efforts and accomplishments of individual ministries are linked together in the common enterprise of fulfilling government's strategic goals.

The government strategic plan identifies three overarching goals: economic growth, a supportive social fabric, and healthy communities and a sustainable environment. At a fundamental level, the mandate of the Ministry of Advanced Education is germane to all three. A well-educated population and a dynamic, innovative post-secondary research sector in B.C. are increasingly recognized as essential to ensuring our long-term prosperity and competitive advantage, our social harmony and interconnectedness, and our physical and environmental well-being. At a more specific level, the ministry's goals and objectives are linked directly to two of government's strategic goals in the manner described below.

Government Strategic Goal: A Supportive Social Fabric

Ministry Goal: A Top-Notch Post-Secondary Education System

The ministry contributes to a supportive social fabric in B.C. by ensuring that students have access to a wide range of high-quality post-secondary education and training programs delivered in an efficient and integrated manner. This ministry goal consists of the following three related objectives:

Ministry Objective: Access and choice for B.C. post-secondary students

The post-secondary system will be large enough and offer a suitably diverse range of programming to meet the demand of qualified students. Opportunities to pursue post-secondary education will be available throughout the province, and barriers such as financial or geographic limitations will be minimized.

Ministry Objective: A more efficient and integrated post-secondary education system

Students will be able to progress smoothly through the post-secondary system and complete courses and programs in a reasonable amount of time.

Ministry Objective: A quality post-secondary system

The education and training that post-secondary students receive in B.C. will exhibit a standard of excellence that is comparable or superior to that available anywhere in the world.

Ministry Goal: Responsive and Effective Management

The ministry also contributes to a supportive social fabric by ensuring that the post-secondary system exhibits sound management practices and responds quickly to the needs of its stakeholders. This ministry goal consists of the following two related objectives:

Ministry Objective: Ministry business practices are efficient and effective

The ministry will execute its responsibilities in a manner that reflects the public interest and uses resources cost-effectively.

Ministry Objective: The ministry provides leadership to the post-secondary system and ensures accountability

The ministry will work with post-secondary partners to ensure that the system achieves the goals and objectives inherent in government's priorities and demonstrates public accountability.

Government Strategic Goal: A Strong and Vibrant Provincial Economy

Ministry Goal: Economic and Social Development

The ministry contributes to a strong and vibrant economy in B.C. by ensuring that the post-secondary system offers education and training that is relevant to the immediate and long-term needs of a modern, evolving economy, and by fostering continued growth in public post-secondary research activity. This ministry goal consists of the following two related objectives:

Ministry Objective: A post-secondary system capable of knowledge generation, innovation and research

The ministry will continue to support public post-secondary research activity, which contributes to the economic and social well-being of British Columbians through discovery, innovation and the creation of knowledge.

Ministry Objective: A relevant and responsive post-secondary system

Education and training offered through the post-secondary system will impart the knowledge and skills needed in the labour market, particularly in fields confronting skills shortages.

Report on Results

Progress toward the ministry's goals and objectives is tracked with a set of performance measures. This section presents the results achieved in 2004/05 for each measure identified in the 2004/05 - 2006/07 service plan, demonstrating linkages to the relevant goals and objectives. For each measure, baseline data are provided along with the target for 2004/05 and the actual results achieved based on the most current data available.

The measures and targets were developed through collaboration between the ministry and system stakeholders. The aim of this collaboration was to identify a small number of critical aspects of post-secondary education that could provide accurate and reliable information about system performance. In identifying these measures, it was recognized that the diversity and complexity of post-secondary education in B.C. may produce anomalies in a given year.

The baseline year for the performance measures that are based on survey data has been updated to facilitate the trend line analysis required for determining whether their targets were achieved, and to improve consistency with other measures, many of which use the 2001/02 (fiscal or academic) year as the baseline. This change does not positively affect the interpretation of the results. For more details on interpreting these measures and the targets, please refer to Appendix 1. Further information on all performance measures — such as the rationale and context for the measure, the data on which it is based and the source of the data, and methodological considerations regarding the measure — may be found in the Standards Manual for Performance Measures
(see: http://www.aved.gov.bc.ca/accountability *).

Goal 1: A top-notch post-secondary education system

Core Business Areas: Educational Institutions and Organizations; and Debt Service Costs and Amortization of Prepaid Capital Advances

Objective 1: Access and choice for B.C. post-secondary students

Performance Measure 1: Total student spaces in B.C. public post-secondary institutions

Increasing capacity in the public post-secondary system is a ministry priority. Capacity — or the amount of seats available to those who wish to be admitted — is, along with other aspects such as affordability and population size, a key factor affecting access to post-secondary education. The ministry devotes substantial efforts and resources to increasing system capacity. In 2004/05 the ministry provided public post-secondary institutions with over $1.3 billion for operating grants, nearly $200 million for debt service capital cash flow, and nearly $67 million for annual capital allowances.

This performance measure indicates whether B.C. public post-secondary institutions were able to meet the total FTE targets outlined in their 2004/05 budget and accountability letters. It is calculated using end-of-fiscal-year audited enrolment reports submitted to the ministry

* *Refer to note on page 3.*

by public post-secondary institutions, and is expressed as a total count of actual FTEs delivered and a ratio of actual to targeted FTEs, also known as a utilization rate.

Factors that may positively or negatively affect results for this measure are those that influence student demand and student retention. Some of these are beyond the ability of post-secondary institutions to control, such as local economic conditions and employment opportunities as well as demographic shifts. Other factors include institution enrolment management policies and procedures and institutional restructuring.

Results

Baseline	2004/05 Target	2004/05 Actual	2004/05 Variance
Data for 2001/02 fiscal year: 154,991 total targeted FTEs (including entry level trades training {ELTT} but excluding apprenticeship spaces).	Increase by 3,217 FTEs to 164,065 total FTEs.	Data for 2004/05 fiscal year: 161,681 actual FTEs 98.5% utilization.	Target not achieved.

In 2004/05, the Province announced a significant expansion of the public post-secondary education system. By 2009/10 the system will grow by 25,000 spaces — from 160,848 in 2003/04 to 185,848 in 2009/10.

An expansion of this magnitude requires significant effort and planning over the next few years to ensure sufficient facilities, faculty, programming and student services are put in place. Institutions and the Province are working closely together to manage this expansion in an effective and efficient manner.

In the first year of the plan, the ministry funded 164,065 student FTEs. The results indicate that institutions delivered 161,681 total FTEs, 98.5 per cent of the ministry's service plan target.

In the first three years of the plan, much of the growth is targeted at the university sector to address immediate challenges relating to higher-than-average student admission grade point average (GPA) requirements. Progress has been made in starting to address this challenge. In 2004/05, the university sector continued to produce more FTEs than for which universities were funded, though less so than in previous years. Institutes also show strong FTE production, producing at or over targets.

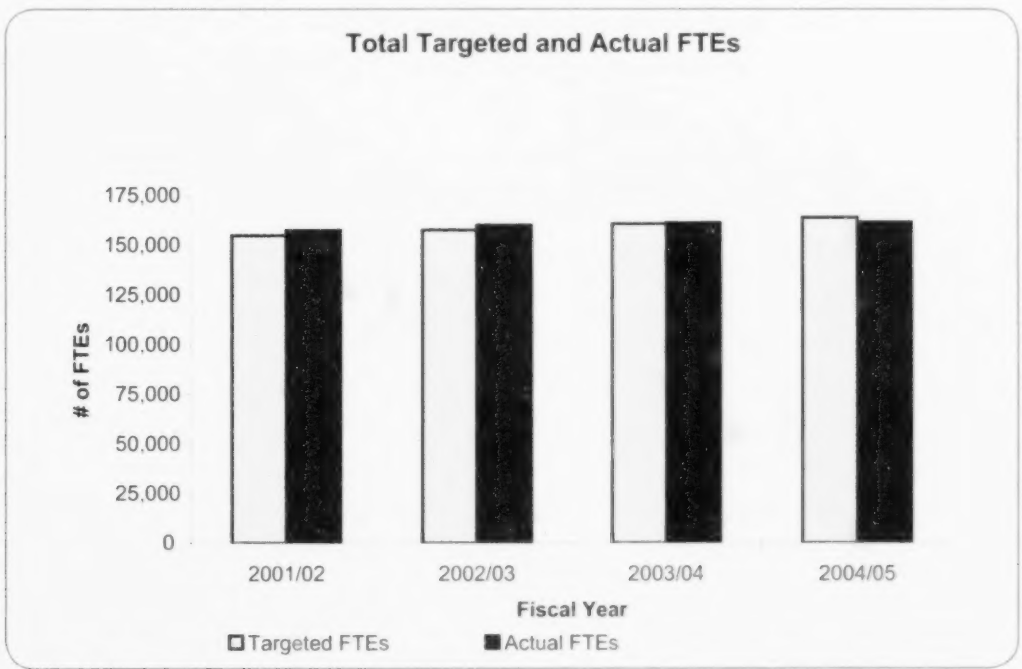
Colleges and university colleges as a whole are showing less favourable results, although a number of institutions continue to meet targets. Regional demographics, changes in economic activity and lead time to implement new programs, delivery models, and facilities all influence the level of student activity.

The planned addition of 25,000 student spaces by 2009/10 reflects both growth in the 18-29 year-old population and strong labour market demand for post-secondary training

and education. Given the magnitude of the expansion, there may be a period of adjustment before all of the new spaces are fully utilized.

The ministry will continue to analyze utilization data and work with each institution to determine if current factors affecting utilization are cyclical or structural in nature. In the 2005/06 budget and accountability letters to institutions, the ministry stated that:

> Access continues to be the ministry's highest priority for the 2005/06 – 2010/11 period and beyond. The Strategic Investment Plan that grows seats by 25,000 by 2009/10 and 28,000 by 2010/11 supports this priority. The ministry will continue to monitor FTE performance throughout the year and work with institutions to mitigate risks in meeting FTE targets. This is particularly important as utilization information will be reported in ministry and Institutional Service Plan Reports.
>
> Starting in 2005/06, the ministry will also begin to monitor and assess utilization rates under the Strategic Investment Plan to identify any long term structural challenges associated with the six year FTE targets. Minor adjustments to targets may be warranted either across regions or across institutions.



Performance Measure 2: Number of degrees, diplomas and certificates awarded

All students who fulfil program requirements at public post-secondary institutions, including apprenticeship and industry training programs at public institutions and private organizations funded through the Industry Training Authority (ITA), are entitled to a formal qualification — either a degree, diploma, or certificate (including certificates of apprenticeship, qualification and Red Seal Certification). Counting these credentials

provides an understandable and recognizable indication of the system's capacity to meet student demand and to ensure sufficient numbers of graduates. This information provides a perspective on whether public post-secondary institutions and the ITA have the capacity to meet the demand of B.C. students to complete their post-secondary programs.

This measure is expressed as a count of credentials awarded (issued) by public institutions and the ITA. It is calculated using data on the number of credentials awarded by public post-secondary institutions and the ITA.

Baseline and annual performance data for this measure are three-year averages to account for variations caused by institutional enrolment management policies and procedures. Specifically, the baseline is a fixed three-year average, and annual performance is measured using a rolling three-year average (i.e., the 2004/05 results shown below are expressed as a three-year average ending in the 2003/04 academic year). To provide a complete picture of the post-secondary system, all credentials that fit the credential definition (i.e., credentials awarded for all programs that lead to a formal qualification, as opposed to a certificate of attendance) are included regardless of whether they are related to base funded (ministry funded) or non-base funded (contract or cost-recovery funded) educational activity (e.g., credentials issued to international students are included).

Results for this measure will depend on the number of students who complete and apply for graduation from their programs. Some of the factors that may affect these results include: historical and current institution capacity (based on physical capacity and the level of funding available); personal, social and economic factors that directly affect students' participation in and completion of programs; and institution business practices and enrolment management policies and procedures. While ministry efforts to expand system capacity by increasing funding to institutions and increasing the targeted number of student FTEs may not produce comparable increases in credentials awarded immediately, by building capacity now, institutions will be able to increase the number of students who complete programs over the next few years.

It is important to note that this measure does not indicate how many of the students who start programs ultimately complete them, or how long it may take them to complete. In this sense it is not a traditional graduation rate, but simply a count of program output (i.e., the number of credentials issued by institutions to students who complete programs and apply to receive a credential). Nonetheless, it is considered one of the more critical indicators of the performance of the post-secondary system.

Results

Baseline	2004/05 Target	2004/05 Actual	2004/05 Variance
52,909 total credentials awarded.[1]	Increase total credentials awarded by 1.5% (3% from baseline).[2]	56,687 credentials awarded, an increase of 3.8% (7.1% from baseline).[3,4]	Exceeded target.

[1] Baseline is a three-year average of 1999/00, 2000/01 and 2001/02 academic years.

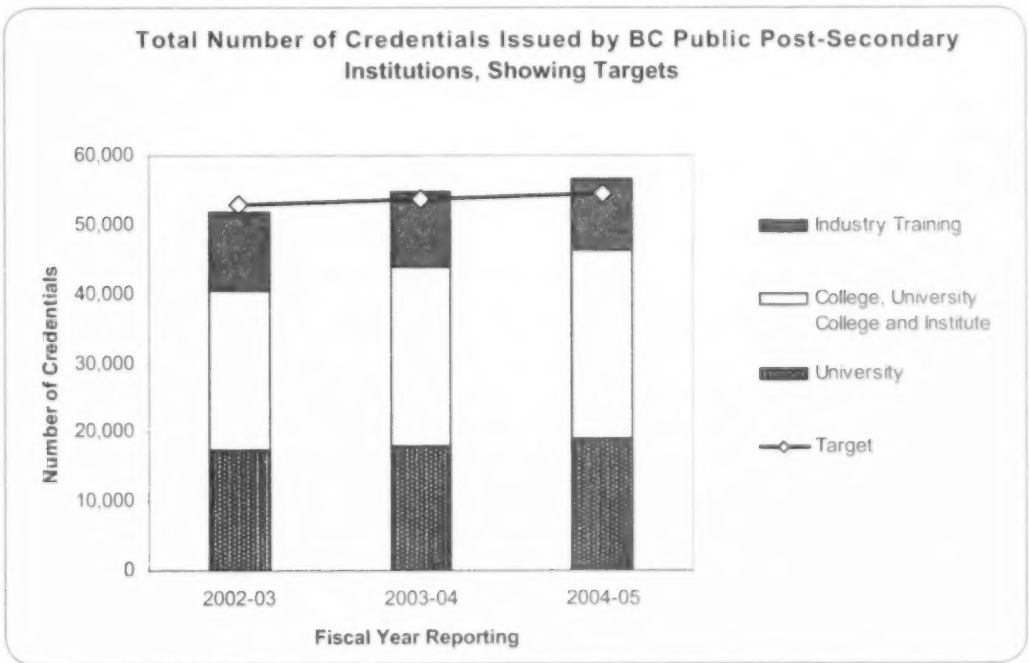
[2] The targeted increase of 1.5 per cent is over the 2003/04 actual result of 54,617, which is the three-year average of 2000/01, 2001/02 and 2002/03 academic years.

[3] 2004/05 actuals reported are a three-year average of 2001/02, 2002/03 and 2003/04 academic years.

[4] The ITA has identified various issues in regard to the reliability of historical information concerning the number of industry training credentials awarded. The ministry is working with the ITA to examine these issues, and future restatement of credentials information utilized for this measure may or may not be required.

The results indicate that total credentials awarded were 7.1 per cent higher than the baseline, substantially exceeding the target of 3.0 per cent over baseline. Results should be interpreted with a long-term perspective to compensate for short-term irregularities.

The following graph provides a breakdown of the number of credentials awarded by public post-secondary institutions, as reported for the past three fiscal years.



Performance Measure 3: B.C. public post-secondary graduate rate

This measure provides relational context for the implications about system capacity inferred by the number of credentials awarded (see Performance Measure 2). It is the number

of credentials awarded by public institutions per 1,000 people living in B.C. aged 18-29. Specifically, it compares credential data from institutions and the ITA to population data from BC Stats. This measure is referred to as a 'graduate rate' rather than a 'graduation rate' because it compares the number of graduates to the B.C. population aged 18-29 years, not to the number of students who entered the public post-secondary system. As such, it suggests whether an increase in the number of credentials awarded exceeds the number that would be expected due to an increase in the size of the 18-29 year-old population cohort.

The 18-29 year-old cohort was selected as the most appropriate representation of the age of post-secondary students in British Columbia.

It is important to note that this measure is calculated using the number of credentials awarded by institutions and the ITA for the most recent academic year and the BC Stats population estimate as of July 1 of the academic year.

Results

Baseline	2004/05 Target	2004/05 Actual	2004/05 Variance
83.6 credentials awarded per 1,000 B.C. population aged 18-29 years.[1]	Maintain or increase rate by up to 1% (0-2% from baseline).[2]	85.3 credentials awarded per 1,000 B.C. population aged 18-29 years.[3,4]	Achieved target.

[1] Based on credentials awarded in 2001/02 academic year and population as at July 1, 2002.

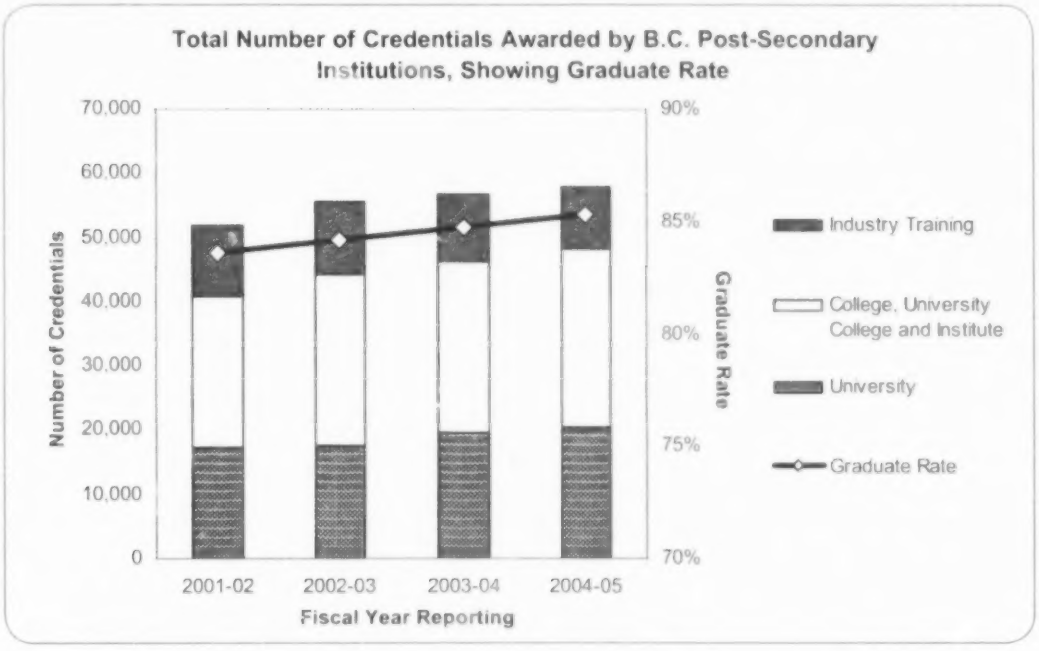
[2] The targeted increase of up to one per cent is over the 2003/04 actual result of 84.2 credentials awarded per 1,000 B.C. population, which was based on credentials awarded in 2002/03 academic year and population as at July 1, 2003.

[3] Based on credentials awarded in 2003/04 academic year and population as at July 1, 2004.

[4] The ITA has identified various issues in regard to the reliability of historical information concerning the number of industry training credentials awarded. The ministry is working with the ITA to examine these issues, and future restatement of credentials information utilized for this measure may or may not be required.

The results indicate that the increase in credentials awarded exceeded the number expected due to the natural growth in the 18-29 year-old population in B.C.

The following graph shows historical data for credentials awarded and the graduate rate as reported in fiscal years 2001/02 – 2004/05.



Performance Measure 4: Per cent of annual educational activity occurring between May and August

The ministry is committed to ensuring public post-secondary institutions maximize the efficient use of existing publicly-funded facilities before additional funds are allocated for capital expansion. One of many possible ways to increase efficiency is to promote the year-round use of facilities for student instruction. For many reasons, the period of May through August has historically been a time of reduced instructional activity at most institutions (although it may also be a period of increases in other types of activity, such as research). For those institutions that are able to offer more instructional activity during this period, doing so may ease some of their difficulty meeting student demand during the winter and may result in more efficient use of resources and capacity.

This measure is intended to provide an indication of overall system progress in this regard. It is the percentage of annual instructional activity conducted during the summer academic period compared to the fall and winter academic periods. It is determined using data from public post secondary institutions. Universities provide data showing equivalent enrolments taught (EETs) through The University Presidents' Council; colleges, university colleges and institutes provide student contact hour data to the ministry's facilities branch. The rate is calculated by taking the program activity that occurs in the months May to August and dividing it by the total annual activity.

It should be noted that institutions have varying ability to promote instructional activity during the summer academic period. One obstacle that many encounter is a drop in student demand at this time as students pursue jobs in seasonal industries such as tourism to help finance their education. Reduced student demand limits the ability of some institutions — particularly rural institutions — to expand their summer use cost-effectively. Nonetheless, this measure does offer useful information for capital planning and provides one perspective on system capacity.

Results

Baseline	2004/05 Target	2004/05 Actual	2004/05 Variance
Data for 2001/02 academic year:[1] Colleges and institutes sector average: 11.5%; University sector average: 15.2%; System average: 13.3%.	Increase activity toward achievement of a 21% system wide average delivery between May and August.	Data for 2003/04 academic year: Colleges and institutes sector average: 14.2%; University sector average: 15.9%; System average: 15.0%.	Achieved target.

[1] The baseline was increased slightly from the previously stated figure due to the availability of more complete data.

The results indicate that public post-secondary institutions are increasing their utilization of facilities in the summer months. The following table shows the May-August facility utilization rates for the university and college sectors since the 2001/02 academic year.

Historical Summer Facilities Utilization

Sector	2001/02 Academic Year	2002/03 Academic Year	2003/04 Academic Year
University	15.2%	15.8%	15.9%
College	11.5%	13.1%	14.2%
System total	13.3%	14.4%	15.0%

Beginning with the 2005/06 fiscal year, this measure has been dropped from the ministry service plan because the ministry views overall facilities utilization as a more meaningful measure of efficiency than utilization at one particular time. However, as institutions are required to demonstrate a trend toward greater summer facilities utilization before issuing requests for capital expansion, this measure has been retained as a measure for institutional service plans issued under the Accountability Framework for British Columbia's Public Post-Secondary Education System. The ministry will continue to explore methods by which institution efficiency in the use of physical capacity can be appropriately and accurately measured.

Performance Measure 5: Post-secondary participation rates for population 18-29

The ministry works with public institutions to increase capacity and improve access to post-secondary education. At the same time, the population of 18-29-year-olds — the age group considered most representative of post-secondary students in B.C. — is increasing, placing additional demands on the post-secondary system.

This measure was developed to provide context for efforts to increase capacity and improve access at a pace that exceeds population growth for the 18-29 year-old cohort. It was intended to provide an indication of the level of demand for post-secondary education in B.C. and whether the system has been successful in meeting that demand. Additionally, this measure was to be used to provide an inter-provincial comparison of post-secondary participation in Canada. It was calculated using enrolment data from Statistics Canada. However, Statistics Canada has been unable to provide current data, so we are unable to determine results for 2004/05.

Results

Baseline	2004/05 Target	2004/05 Actual	2004/05 Variance
Data for 1999/00: B.C. overall participation rate = 25%; B.C. third highest provincial rate in Canada.	Maintain or improve rank in Canada.	Data unavailable.	Unable to determine.

Because the Statistics Canada data on which this measure was based are unavailable, this measure has been operationally re-defined for 2005/06. The revised measure will use enrolment data from B.C. public post-secondary institutions and population estimates from BC Stats. It will not provide an inter-provincial comparison of post-secondary participation but will instead compare current and historical participation within B.C.

Performance Measure 6: Student spaces in developmental programs (Adult Basic Education [ABE], English as a Second Language [ESL] and Adult Special Education [ASE])

Maintaining access to developmental programs like ABE, ESL and ASE is a priority for the ministry. Many adult learners, for a variety of reasons, have not achieved the level of education they need or want in order to build the future they desire for themselves and their families. Some of these learners are disadvantaged; others are newcomers to Canada. Developmental programs offer them the opportunity to gain the skills necessary to participate fully in the B.C. economy and society. Some learners enrol in order to gain their Adult Graduation Diploma. Others enrol in advanced (grade 11) and provincial (grade 12) level ABE programs to improve their grades or complete pre-requisites for post-secondary study.

This measure provides an indication of the post-secondary system's capacity to accept students into these programs. It indicates whether public post-secondary institutions in British Columbia were able to meet the FTE targets for developmental programs outlined in their 2004/05 budget and accountability letters. This measure is calculated using end-of-fiscal-year audited enrolment reports submitted to the ministry by public post-secondary institutions, and is expressed as a total count of actual FTEs delivered and a ratio of actual to targeted FTEs, also known as a utilization rate.

Among the factors that may positively or negatively affect results for this measure are student demand, which may be affected by changes in high school completion rates, and by student retention issues, which may be influenced by the economy or changes in the policies of other ministries and governments. Results may also be affected by institutional enrolment management policies and procedures and institutional restructuring.

Results

Baseline	2004/05 Target	2004/05 Actual	2004/05 Variance
Data for 2003/04 fiscal year: 13,197 FTEs.	Maintain or increase.	Data for 2004/05 fiscal year: 12,711 actual FTEs; 96.6% utilization rate.[1]	Target not achieved.

[1] The cumulative institutional targets on which the utilization rate is based were lower than the baseline due to an unavoidable timing problem. The baseline of audited enrolment data for 2003/04 was not available until after institutional targets for 2004/05 were required. The targets were, therefore, based on a combination of other types of data, including the interim enrolment estimates from institutions, the history of developmental program delivery, and the three-year average of FTEs reported by institutions.

The results indicate that the total number of student FTEs in developmental programs decreased from the baseline.

Student demand for developmental programs fell in a number of areas in the province in 2004/05. While some institutions reported that fewer students accessed fundamental level courses because they could find no means of income support while studying, others said improvements in local economies led to more full-time employment for people who might otherwise seek to upgrade their skills.

The ministry is continuing to use the data for 2003/04 as the baseline for this measure, and the targets for future years continue to be "maintain or increase" from the baseline. The ministry will also undertake further research to determine why fewer students accessed these programs in 2004/05.

Performance Measure 7: Student spaces in online learning (BCcampus) programs

Online learning programs improve access, flexibility and choice for post-secondary students. They enable students to participate in courses and programs offered by institutions across the province, regardless of a student's geographic location.

This measure provides one perspective on the efforts to increase access to these programs. It indicates whether public post-secondary institutions in British Columbia were able to meet the FTE targets for online learning (BCcampus) programs outlined in their 2004/05 budget and accountability letters. It is calculated using end-of-fiscal-year audited enrolment reports submitted to the ministry by public post-secondary institutions, and is expressed as a total count of actual FTEs delivered and a ratio of actual to targeted FTEs, also known as a utilization rate.

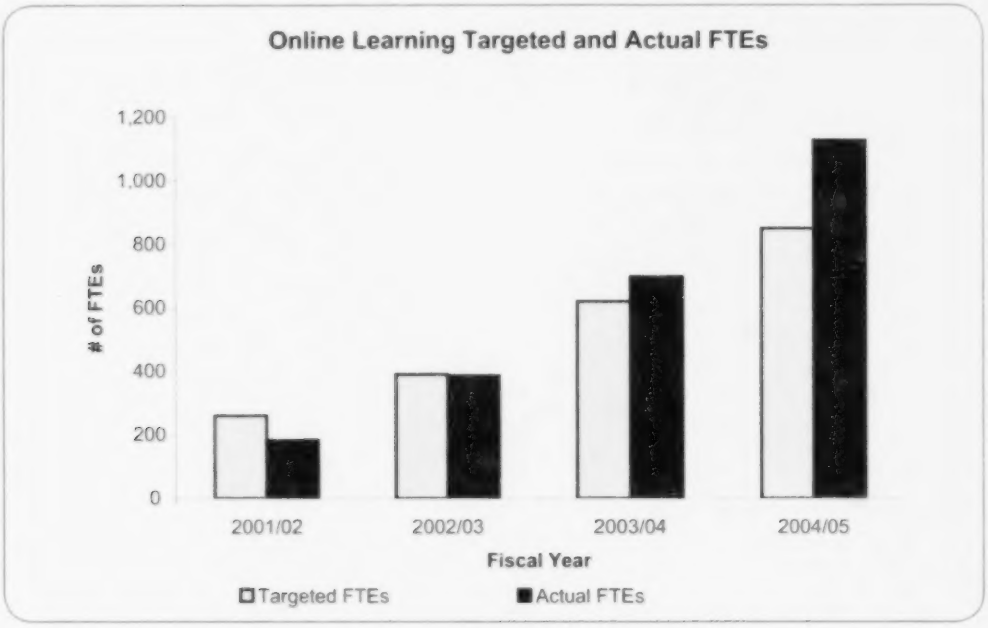
Courses considered to be online for this measure are those that are offered wholly online, that lead to an online or distance program credential, and are available to any qualified student within the province.

Factors that may positively or negatively affect results for this measure include: student demand and retention issues, and institution enrolment management policies and procedures. For online learning, where part-time or single course enrolments are common, counts of FTEs typically represent more separate enrolments and individual students taught than counts of FTEs in other programs.

Results

Baseline	2004/05 Target	2004/05 Actual	2004/05 Variance
Data for 2001/02 fiscal year: 260 total targeted FTEs.	Increase by 230 FTEs to 850 total FTEs.	Data for 2004/05 fiscal year: 1,128 actual FTEs; 132.8% utilization rate.	Exceeded target.

The results indicate that the number of student FTEs captured by this measure increased in 2004/05 by an amount greater than targeted. The graph below shows historical results for this measure.



As this measure counts only BCcampus online programs, it does not capture any other online programs that also contribute to improving access, flexibility and choice for students. In light of this shortcoming, this measure has not been included in the ministry's 2005/06 – 2007/08 service plan. The ministry is exploring options for developing a more suitable measure of online learning FTEs, and when such a measure is developed it will be included in future ministry service plans.

Performance Measure 8: Number and per cent of public post-secondary student population that are Aboriginal

Increasing post-secondary participation and success rates among Aboriginal people is a priority for the ministry and public post-secondary institutions. This will be realized within a post-secondary education system in which public institutions and Aboriginal organizations and institutions play important roles and are supported by the combined resources of the federal and provincial governments.

The ministry and our post-secondary partners devote considerable efforts and resources to realizing this vision. For example, over the past five years the ministry has contributed $8 million through the Aboriginal Special Projects Fund to support projects that will help ensure relevant, high-quality education programs for Aboriginal learners in a wide range of areas. In addition, most public post-secondary institutions employ Aboriginal Coordinators who work with Aboriginal students, providing cultural and academic support.

An indication of the level of Aboriginal student participation is revealed by this performance measure. It is the actual number of Aboriginal students in the post-secondary system and their proportion relative to the total number of students enrolled. This measure is calculated from information contained in public post-secondary institution registration and administration systems, and the Ministry of Education student database.

Results for this measure must be interpreted with an awareness of the data limitations. When registering in a post-secondary program, students have the opportunity to self-identify as persons of Aboriginal ancestry. For many reasons, however, not all Aboriginal students choose to do so. Further, there are no standards for how questions about Aboriginal ancestry are phrased on student application forms, or standards for how such questions are recorded in student registration systems at institutions. As a result, public post-secondary institution registration data may under-represent the actual number of Aboriginal learners enrolled. To compensate for this limitation, counts from the administrative records of post-secondary institutions are enhanced by adding those students who were identified in K-12 administrative records as being of Aboriginal ancestry (to ensure student privacy, *Freedom of Information and Protection of Privacy Act* guidelines are carefully observed). This method may not provide an entirely complete picture of Aboriginal student participation in post-secondary education, but it represents best efforts under current data limitations.

Results

Baseline	2004/05 Target	2004/05 Actual	2004/05 Variance
Data for 2002/03 academic year:[1,2] # = 13,914; % = 3.7.	Maintain or increase.	Data for 2003/04 academic year: # = 15,562; % = 4.0.	Achieved target.

[1] Does not include data from Royal Roads University.

[2] The baseline was increased slightly from the previously stated figure due to the availability of more complete data.

The results suggest both an overall increase and a proportional increase in Aboriginal student participation in post-secondary education.

It is important to interpret these results in context of the overall Aboriginal population growth. Statistics Canada data reveal that from 1951 to 2001, while the Canadian population doubled, the Aboriginal ancestry population grew sevenfold. In B.C. from 1996 to 2001 the overall youth population aged 15-24 grew 6.3 per cent but the Aboriginal population of the same age grew 15.9 per cent.

Interestingly, the fast growing Aboriginal population is only partly due to demographic change. Another important factor is the increasing tendency of people to identify as Aboriginal. This raises the question of whether changes in Aboriginal population are explained by a true demographic change or by an increase in reporting of Aboriginal identity. Both factors may contribute to the increase in Aboriginal post-secondary participation. Therefore, the observed increase between academic years 2002/03 and 2003/04

(i.e., 3.7 per cent to 4.0 per cent) may only reflect an increase in the number of students identifying themselves as Aboriginal and/or an increase in the overall B.C. Aboriginal youth population.

As data quality improves, the ministry will work to develop measures of educational outcomes for Aboriginal students.

Performance Measure 9: Number of private and out-of-province public degree programs approved

To increase access and choice for post-secondary students, government passed the *Degree Authorization Act* (DAA) in 2003. The DAA was intended to improve the method by which applications to offer degree programs are processed, thereby encouraging growth in the number of programs available to students.

Previously, private and out-of-province public institutions wishing to grant B.C. degrees needed to obtain authority through a special act of the legislature. The DAA provided the means for a much more efficient method, eliminating the need for special legislation. Under the DAA, a Degree Quality Assessment Board was established to review applications to offer degree programs and to use the word "university" in the province. The board subjects each application to a rigorous degree quality assessment process and, if satisfied that the application meets a thorough set of criteria, it makes a recommendation to the minister that the application be approved.

This measure is the count of applications approved by the minister from private post-secondary institutions and public institutions based outside B.C. that wish to offer degree programs in the province.

While this measure can provide useful information about the number of new degree options available in the province, it should be noted that the ministry has no control over the number of applications received or the quality of those applications. The ministry has greatly improved the process, but it is up to institutions to take advantage of these improvements. Also, this measure indicates only those programs that have received final approval and provides no information about applications under review.

Results

Baseline	2004/05 Target	2004/05 Actual	2004/05 Variance
Data for 2002/03 fiscal year: Total private and out-of-province public degree programs approved. = 0.	Increase over baseline.	Data for 2004/05 fiscal year:[1] Total programs; approved = 5.	Achieved target.

[1] There are no data for 2003/04 because the DAA was not brought into force by regulation until November 2003.

The results indicate that five program approvals were granted in 2004/05.

Due to the ministry's limited ability to influence results for this measure, and that it reveals only the output of an administrative process, and that it is unclear what constitutes a 'good' or 'bad' result, this measure has not been included in the ministry's 2005/06 - 2007/08 service plan. As more data on private post-secondary education becomes available they will be used to formulate more suitable performance measures.

Objective 2: A more efficient and integrated post-secondary education system

Performance Measure 10: Program completion measure

This measure was intended to indicate the ability of B.C. public universities to deliver degree programs to students in a timely and efficient manner. The 2004/05 - 2006/07 service plan included a placeholder for a yet-to-be developed measure of program completion and a target to develop the measure in 2004/05.

Results

Baseline	2004/05 Target	2004/05 Actual	2004/05 Variance
Under development.	Develop measure.	Measure developed.	Achieved target.

A measure of program completion was successfully developed in 2004/05. The measure is titled "degree completion rate," and is included in the ministry's 2005/06 - 2007/08 service plan. It is a two-part measure focused on students admitted to the University of British Columbia, Simon Fraser University, University of Victoria and University of Northern British Columbia. One component of the measure is the proportion of direct-entry students that complete their baccalaureate degree within seven years; the second component is the proportion of university transfer students that complete their baccalaureate degree within five years of admission to university.

It is important to note that this is a measure of whether or not students complete their educational programs in a reasonable amount of time, and not a measure of how long it takes students to complete their programs. Measuring program completion at seven years for direct entry students (five years for transfer students) is based on a general consensus that the vast majority of direct entry students that are going to complete their baccalaureate program will have done so within seven years (five years for transfer students). Attempting to measure program completion at an earlier point in time (e.g., five years for direct entry students and three years for transfer students) would ignore the significant number of students who complete their programs over a longer period of time due to personal choice, stop-outs for employment purposes, and other factors.

In future years this measure will provide a basis of comparison between British Columbia post-secondary institutions and those in other jurisdictions.

A Note on the B.C. Transfer System

The B.C. transfer system enables students to receive credit for courses and programs completed at B.C. institutions (both public and private) when pursuing further education at other B.C. institutions. The effectiveness of the transfer system, which is the subject of the next three performance measures, provides one indication of the overall efficiency and integration of the post-secondary education system. We know the transfer system is working because:

Students Have the Opportunity to Transfer

This is demonstrated by the extensive block and course transfer agreements in place, which are detailed in Performance Measure 11. The opportunity to transfer is expanding, as in 2004 the British Columbia Council on Admissions and Transfer (BCCAT) consulted with institutions in the B.C. transfer system about allowing private institutions that have obtained ministerial consent to offer degree programs in the province under the *Degree Authorization Act* to be eligible to request articulation within the transfer system. The consultation resulted in a set of policies and procedures regarding articulation with private institutions, thereby further increasing transfer opportunities in B.C.

Students Do Transfer

Recent research jointly undertaken by BCCAT, public institutions, and the ministry indicated that 4,006 students who were enrolled in B.C.'s public colleges, university colleges and institutes in 2003 transferred to one of B.C.'s four largest public universities in 2004.

Students Who Transfer Are Satisfied with Their Transfer Experience

As indicated in the results for Performance Measure 12, in each of the past three years, over 85 per cent of former students who used the transfer system were either very satisfied or satisfied with their transfer experience.

Students Who Transfer Are Successful at University

A study of students admitted to Simon Fraser University (SFU) between 1992 and 1999 found that among those who completed their baccalaureate degrees, the proportion who completed within seven years of high school graduation was roughly the same for both transfer students and direct entry students. Of degree completers, transfer students and direct entry students received roughly the same GPA in their final 60 credits at SFU, when differences in high school provincial exam scores are controlled. The study also found that for students with high provincial exam scores, transfer students performed equally as well at SFU as direct entry students. For students with lower provincial exam scores, transfer students performed as well as or better than direct entry students.

Performance Measure 11: Number of block and course transfer agreements

This performance measure is intended to gauge the amount of transfer opportunity available to students in B.C. It is the number of transfer agreements arranged between institutions. The measure is calculated based on a count of active agreements registered with the BCCAT on March 31. This count includes both course-by-course transfer agreements and block transfer arrangements, which are groups of courses, often in the form of certificates or diplomas, that are recognized as having an academic wholeness or integrity, and can be related meaningfully to degree programs or other credentials.

When interpreting results for this measure it should be noted that the number of transfer agreements may be affected by program changes at either sending or receiving institutions, or by reviews of agreements after a specified term. Also, a single new block transfer arrangement may replace a number of existing course-to-course agreements, which would improve transfer opportunities for students but may be perceived as a negative result from the perspective of this measure. Finally, information for this measure may be incomplete if institutions do not report all of the transfer agreements they have negotiated. Course and block transfer agreement numbers reported by BCCAT are based on a snapshot of the number of agreements registered with BCCAT on a single day of the year (March 31) and do not reflect the ongoing additions and deletions of agreements.

Results

Baseline	2004/05 Target	2004/05 Actual	2004/05 Variance
Data as at March 31, 2002: 47,281 course transfer agreements; 605 block transfer arrangements.	Increase course transfer agreements and block transfer arrangements between 2–5% (4–10% from baseline).	Data as at March 31, 2005: 57,520 course transfer agreements; 786 block transfer arrangements.	Achieved target.

The results suggest increased access and flexibility for post-secondary students. The table below provides historical results for this measure.

Historical Data

Course and Block Transfer Agreements						
Agreement Type	**2001/02 (March 31, 2002)**	**2002/03 (March 31, 2003)**	**2003/04 (March 31, 2004)**	**2004/05 (March 31, 2005)**	**% Change Over Baseline (March 31, 2002)**	**Annual % Change (March 31, 2005)**
Course Transfer Agreements	47,281	50,172	52,248	57,520	21.7	10.1
Block Transfer Agreements	605	602	774	786	29.9	1.6

Due to the limitations of this measure described above, this measure was not included in the ministry's 2005/06 – 2007/08 service plan. Information concerning the efficiency of the transfer system in B.C. will continue to be obtained by the measures "Student satisfaction with transfer" and "Degree completion rate."

Performance Measure 12: Student satisfaction with transfer

This measure indicates how well the transfer system has integrated post-secondary education in British Columbia. It is based on student evaluation of their experience with the transfer system. The measure is calculated as the percentage of former students who transferred from one B.C. public post-secondary institution to another, who expected to transfer credit, and who indicated via survey that they were either satisfied or very satisfied with their overall transfer experience.

When interpreting results it is important to note that while the measure reflects the experience of students who successfully transferred credits, it does not provide information on students who were unsuccessful in their attempt to transfer credits. Further, given that this data is obtained from student surveys, it may be possible that this measure unintentionally reflects student satisfaction with aspects of their educational experience other than their transfer experience, such as institutional capacity, availability of programs and courses, etc. Nonetheless, as a measure of how well the transfer system works for students, this may be the most effective method of obtaining direct and unambiguous information for evaluative purposes.

Results

Baseline	2004/05 Target	2004/05 Actual	2004/05 Variance
87.8% of former students who transferred and expected to transfer credits were very satisfied or satisfied with their transfer experience (2002 survey).	Maintain high level of satisfaction (benchmark — 90%) or demonstrate performance improvement over time.	86.6% (2004 survey).	Target not achieved.

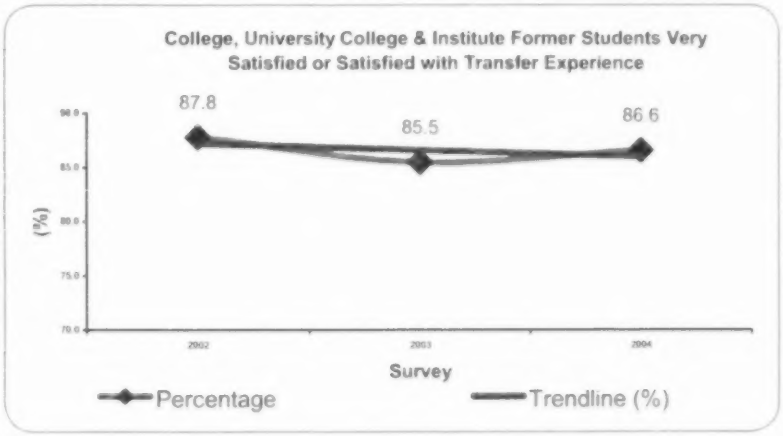
The results indicate that the target was not achieved on the basis of the declining trend line, as indicated in the graph below. However, in each of the past three years, over 85 per cent of former students were very satisfied or satisfied with their transfer experience. Also, it is worth noting that if results of the 2000 survey (85.6 per cent) were included, the trend line would be slightly inclined.

Historical Data[1, 2]

Survey Year	%
2002	87.8
2003	85.5
2004	86.6

[1] For most measures that use student outcomes survey data, the margins of error are less than 1% at the 95% confidence level.

[2] There are no data for 2001 because the relevant question was not included in the 2001 survey.



Performance Measure 13: Transfer volume measure

The rationale for developing a transfer volume measure was to provide another perspective on post-secondary system efficiency and integration based on the student transfer system. The 2004/05 - 2006/07 service plan included a placeholder for a yet-to-be developed measure of transfer volume and a target to develop the measure in 2004/05.

Results

Baseline	2004/05 Target	2004/05 Actual	2004/05 Variance
No baseline established.	Develop measure.	Measure not developed.	Target not achieved.

In 2004, a group of research directors from public post-secondary institutions and ministry personnel invited representatives from BCCAT to participate in discussions about options for developing a transfer volume measure. In discussion, it became evident that such a measure would not be consistent with the criteria for good performance measures. In particular, it should be implicitly 'good' or 'bad' if the results of a measure go up or down. In the case of transfer volume, considered in light of initiatives to increase access to post secondary education within communities, a decrease in transfer volume could reflect success of the access initiative.

The group agreed that transfer volume provides important contextual information, but is not amenable to a target, and therefore not appropriate as a performance measure. Consequently, a performance measure was not developed.

Objective 3: A quality post-secondary system

Performance Measure 14: Student outcomes — skills gained

This measure indicates the quality of education at B.C. public post-secondary institutions based on students' evaluation of one key educational outcome: the level of skills they gained through their educational experience. It is calculated as the percentage of former students who, when surveyed, indicated that their education helped them develop generic skills commonly regarded as necessary to lead a productive life and that are similar to the types of skills deemed necessary for successful employment by the business community and the Conference Board of Canada.

It is important to note that although skill gain is an outcome of education, it is difficult to quantify because there are no mechanisms to measure a student's skill level prior to admission. Therefore, although students' assessment of the amount their skill level increased through education is an accepted indicator of education quality, this measure is not without limitations that must be considered when evaluating results. These include the limitations inherent to subjective surveying and to any attempt to measure a broad range of skills that may receive differing emphasis based on the particular program of study.

Results

Baseline	2004/05 Target	2004/05 Actual	2004/05 Variance
Per cent of former college, university college and institute students whose program prepared them very well or well: Written Communication: 74.1% Oral Communication: 72.8% Group Collaboration: 81.3% Problem Resolution: 73.9% [1] Critical Analysis: 83.0% [1] Reading and Comprehension: 81.3% Learn on your own: 80.0% Average: 77.9% (2001 survey). Per cent of university baccalaureate graduates who indicated that university helped them develop skills to a very high or high extent: Written Communication: 83.1% Oral Communication: 81.1% Group Collaboration: 77.3% Problem Resolution: 73.5% Critical Analysis: 89.8% Reading and Comprehension: 86.4% Learn on your own: 89.6% Average: 83.0% (2002 survey)	Maintain high level of satisfaction (benchmark — 85%) or demonstrate performance improvement over time.	Per cent of former college, university college and institute students whose program prepared them very well or well: Written Communication: 74.4% Oral Communication: 73.7% Group Collaboration: 83.7% Problem Resolution: 75.8% Critical Analysis: 83.6% Reading and Comprehension: 82.2% Learn on your own: 81.3% Average: 79.2% (2004 survey). Per cent of university baccalaureate graduates who indicated that university helped them develop skills to a very high or high extent: Written Communication: 84.0% Oral Communication: 80.8% Group Collaboration: 77.3% Problem Resolution: 75.4% Critical Analysis: 90.3% Reading and Comprehension: 86.8% Learn on your own: 89.7% Average: 83.5% (2004 survey) [2]	Target substantially achieved.

[1] Baseline data for Problem Resolution and Critical Analysis are drawn from the 2003 college, university college and institute survey because the 2001 survey did not include questions about these skill types.

[2] Comparison of university results with college, university college and institute results is not valid due to different wording of questions and different response scales used in each survey.

The results indicate that the target was substantially achieved on the basis that, for the majority of individual skill types, performance either equalled or exceeded the benchmark or there was demonstrated improvement. For university baccalaureate graduates, the benchmark was equalled or exceeded for three skill types, and for a fourth skill type (problem resolution) there was statistically significant improvement between the 2002 and 2004 surveys. For the remaining three skill types there was no statistically significant change between the 2002 and 2004 surveys. For former college, university college and institute students, the trend line was inclined or horizontal for five skill types, there was statistically significant improvement between the 2003 and 2004 surveys for one skill type (problem resolution), and there was no statistically significant change between the 2003 and 2004 surveys for one skill type (critical analysis).

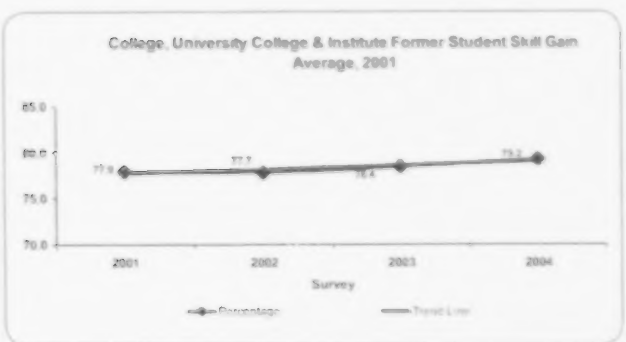
Beginning with the 2005/06 – 2007/08 service plan, the targets for this measure will be based on averages for all skill types.

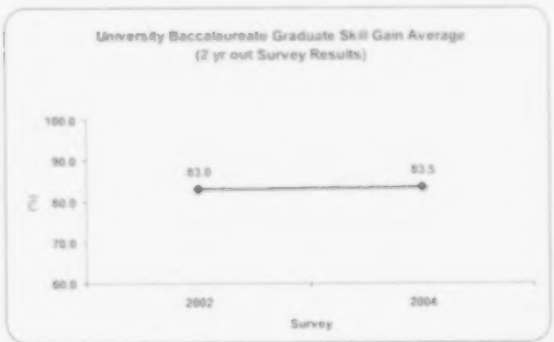
Historical Data[1]

Skill Type	Colleges, University Colleges and Institutes Survey Year				Universities Survey Year	
	2001	2002	2003	2004	2002	2004
Written Communication	74.1%	72.5%	73.3%	74.4%	83.1%	84.0%
Oral Communication	72.8%	71.4%	71.8%	73.7%	81.1%	80.8%[2]
Group Collaboration	81.3%	82.6%	83.3%	83.7%	77.3%	77.3%
Problem Resolution	n/a	n/a	73.9%	75.8%	73.5%	75.4%
Critical Analysis	n/a	n/a	83.0%	83.6%	89.8%	90.3%
Reading and Comprehension	81.3%	82.2%	81.9%	82.2%	86.4%	86.8%
Learn on your own	80.0%	79.7%	81.8%	81.3%	89.6%	89.7%
Average	77.9%	77.7%	78.4%	79.2%	83.0%	83.5%

[1] Margins of error for all data are within plus or minus one per cent.

[2] The observed decrease is not statistically significant.





Performance Measure 15: Student satisfaction with education

As the recipients of post-secondary education, former students are well-suited to comment on it. As such, students' assessment of how satisfied they were with their education experience is an understood and accepted measure of education quality.

This measure is the percentage of former public post-secondary students who, when surveyed, indicated that they were very satisfied or satisfied with their post-secondary education. It is based on data obtained from annual student outcomes surveys.

Institutions are responsible for developing, evaluating and revising the content of their instructional programs. Student satisfaction is regarded as an important consideration in these processes. In addition to the annual outcomes surveys, institutions also use a variety of methods to obtain student feedback and engage students in program development and evaluation. Examples include student participation on program development committees, student membership on institutions' governing boards, senates and education councils, and information obtained through student feedback forms.

There are, of course, a number of factors beyond the control of post-secondary institutions that may affect student satisfaction, but it is expected that these factors are fairly distributed across the group of student respondents in any given year, and are relatively consistent over time. Therefore, the unique characteristics of the group of student respondents is believed to be less of a factor in their satisfaction assessment than the quality of education they received.

Results

Baseline	2004/05 Target	2004/05 Actual	2004/05 Variance
85.1% of former college, university college and institute students completely or mainly satisfied with studies (2001 survey). 93.9% of university baccalaureate graduates very satisfied or satisfied with education (2000 survey).	Maintain high level of satisfaction (benchmark — 90%) or demonstrate performance improvement over time.	86.5% (college, university college and institute 2004 survey). 96.5% (university 2004 survey).[1]	Achieved target.

[1] Comparison of university results with college, university college and institute results is not valid due to different wording of questions and different response scales used in each survey.

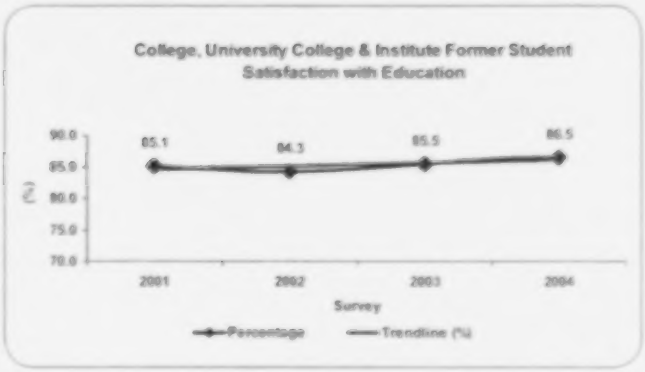
The results indicate that the target was achieved on the basis that results for university baccalaureate graduates exceeded the benchmark, and results for former college, university college and institute students demonstrated improvement over time. Historical data and trend lines for this measure are provided below.

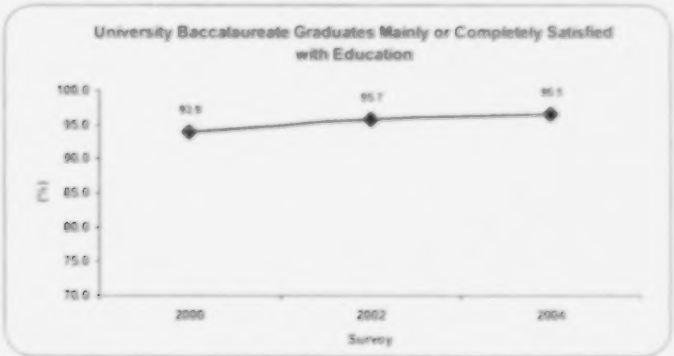
Historical Data[1]

Survey Year	Colleges, University Colleges & Institutes	Universities
	%	%
2000	n/a	93.9
2001	85.1	n/a[2]
2002	84.3	95.7
2003	85.5	n/a[2]
2004	86.5	96.5

[1] For most measures that use student outcomes survey data, the margins of error are less than 1% at the 95% confidence level.

[2] Data from the 2001 and 2003 University Baccalaureate Graduate Surveys is not applicable because it was based on graduates five years after graduation rather than two years after graduation.





Performance Measure 16: Student assessment of quality of instruction

Like Performance Measure 15, this measure is premised on the understanding that as the recipients of post-secondary instruction, former students are well-suited to comment on it. As such, students' assessment of how satisfied they were with the instruction they received is an understood and accepted measure of education quality.

This measure is the percentage of former public post-secondary students who, when surveyed, rated the quality of instruction in their education program as very good or good. It is based on data obtained from annual student outcomes surveys.

Post-secondary institutions seek to hire and retain high quality faculty members and instructors. The ministry, through its financial support of institutions, makes it possible for institutions to offer their faculty and instructors opportunities for professional development through study leaves, grants, release time and supplementary instruction. For example, instruction may be offered on how to use education technology to deliver courses partly or completely online. Institutions may also maintain internal organizations to train new faculty such as the University of Victoria's Learning and Teaching Centre. Another example of a system-level asset is the Provincial Instructor Diploma Program operated by Vancouver Community College, which trains new instructors in the college and institute system in instructional methods to a common standard.

There are, of course, a number of factors beyond the control of post-secondary institutions that may affect student satisfaction with instruction, but it is expected that these factors are fairly distributed across the group of student respondents in any given year, and are relatively consistent over time. Therefore, the unique characteristics of the group of student respondents is believed to be less a factor in their satisfaction than the quality of education they received.

Results

Baseline	2004/05 Target	2004/05 Actual	2004/05 Variance
80.3% of college, university college and institute former students rated the quality of instruction in their program as good or very good (2001 survey). 95.0% of university baccalaureate graduates rated the quality of instruction in their program as very good or good (2000 survey).	Maintain high level of satisfaction (benchmark — 90%) or demonstrate performance improvement over time.	83.5% (college, university college and institute 2004 survey). 95.8% (university 2004 survey).[1]	Achieved target.

[1] Comparison of university results with college, university college and institute results is not valid due to different wording of questions and different response scales used in each survey.

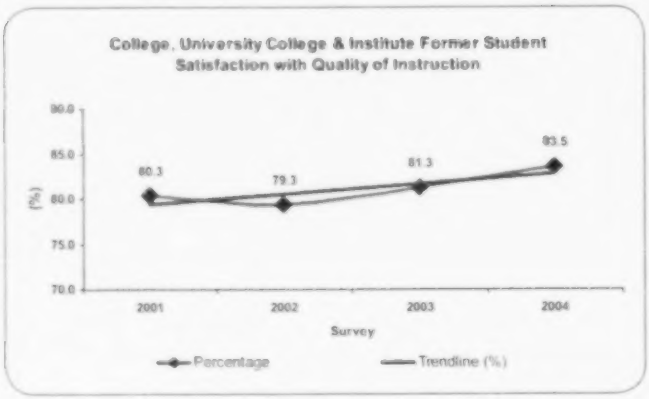
The results indicate that the target was achieved on the basis that results for university baccalaureate graduates exceeded the benchmark, and results for former college, university college and institute students demonstrated improvement over time. Historical data and trend lines for this measure are provided below.

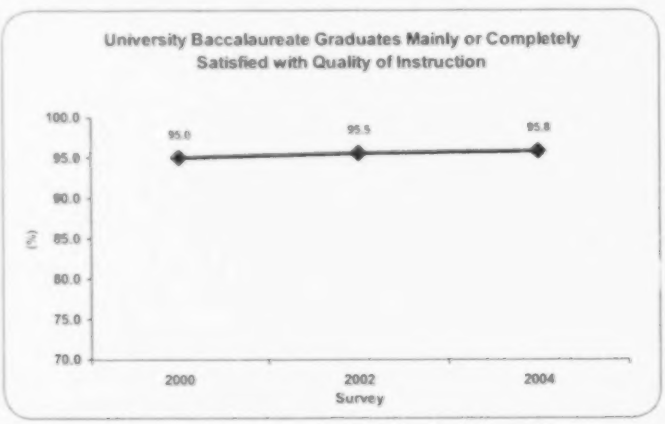
Historical Data[1]

Survey Year	Colleges, University Colleges & Institutes	Universities
	%	%
2000	n/a	95.0
2001	80.3	n/a[2]
2002	79.3	95.5
2003	81.3	n/a[2]
2004	83.5	95.8

[1] For most measures that use student outcomes survey data, the margins of error are less than 1% at the 95% confidence level.

[2] The 2001 and 2003 University Baccalaureate Graduate Surveys did not ask about quality of instruction.





Since decisions concerning instructional policies and procedures are made exclusively by institutions, the ministry has little means to directly influence the results for this measure. Consequently, beginning with the 2005/06 fiscal year, this measure has been dropped from the ministry service plan, although it has been retained as a measure for institutional service plans issued under the Accountability Framework For British Columbia's Public Post-Secondary Education System.

Goal 2: Economic and Social Development

Core Business Areas: Educational Institutions and Organizations; Industry Training and Apprenticeship; and Student Financial Assistance Programs

Objective 1: A post-secondary system capable of knowledge generation, innovation and research

Performance Measure 17: Funding support for research

Research undertaken at post-secondary institutions has a direct impact on the province's economic and social development. It generates industrial growth and improves the quality of life for British Columbians. Investing in research strengthens British Columbia's capacity for innovation, attracts highly skilled research personnel to the province, supports training for jobs in the knowledge economy, promotes networking and collaboration among researchers, and ensures the optimal use of our existing research infrastructure. Post-secondary research in B.C. spans a diverse range of disciplines and specialties. Examples include oceanography research to improve understanding of marine ecology; toxic chemical studies to ensure the safety of food and beverages from the province's agricultural and wine industries; research to identify infants at risk for language delay; and work to develop a prototype tool for use in hip replacement surgeries.

This measure reflects the success of public universities and some university colleges in competing for federal research funding and attracting private investment in post-secondary research. In particular, this measure gives an indication of the success of the British Columbia Knowledge Development Fund, which enables institutions to compete for matching funds from the federal government and private industry. This measure also indicates the province's funding support for post-secondary research. It is based on data compiled by Statistics Canada and presented in a report prepared for the Canadian Association of University Business Officers (CAUBO).

Universities have exclusive authority over allocating internal resources to research and developing proposals for external research funding, and they are highly motivated to increase their research capacity as it has a direct effect on their ability to attract world-class faculty and top students. Consequently, there is minimal risk that universities would not make every effort to increase their research awards. There are, however, other factors that may affect results for this measure, including changes in the criteria for federal research funding programs, the fit between new funding programs and type of research undertaken at universities, the availability of industry support, the cancellation or reduction of federal research funding due to economic decisions, and increased competition from universities in other provinces. In addition, research revenue recorded by the universities does not reflect the entirety of research funding available for university research, as an increasing amount of provincial and federal research funding flows to organizations such as Genome BC and the Michael Smith Foundation for Health Research. While university researchers may have access to this funding it would not appear in the CAUBO report, and would, therefore, not be captured by this measure.

Results

Baseline	2004/05 Target	2004/05 Actual	2004/05 Variance
i. Sponsored research funding from all sources:[1] Federal = $168M Provincial = $34M Other = $107M Total = $308M[2]	i. Maintain or increase.	i. Federal = $229M Provincial = $84M Other = $159M Total = $472M[3]	i. Achieved target.
ii. B.C. proportion of federal awards = 10.0%[1]	ii. Maintain or increase.	ii. B.C. proportion of federal awards = 11.8%[3]	ii. Achieved target.

[1] Baseline reflects revenue reported by public post-secondary institutions to CAUBO for the 2001/02 fiscal year.

[2] Total does not add due to rounding.

[3] 2004/05 actuals reflect revenue reported by public post-secondary institutions to CAUBO for the 2002/03 fiscal year (most recent data available).

The results indicate that the funding received by B.C. public post-secondary institutions from all sources increased from the baseline, and that the proportion of federal research awards directed to B.C. also increased from the baseline.

Performance Measure 18: Number of licences, patents, start-up companies

As discussed in the accompanying text for Performance Measure 17, post-secondary research activity provides numerous benefits for British Columbians. But while Performance Measure 17 looks at funding support to gauge progress toward expanding public post-secondary research capacity, this measure focuses on the commercialization of this activity and the relationship of research to economic growth. It is a count of licence/option agreements, US patents issued, start-up companies, and total income from licences received by British Columbia's three largest universities: the University of British Columbia, Simon Fraser University and the University of Victoria.

It should be noted that this measure does not reflect the many non-commercial benefits of post-secondary research activity, nor the indirect economic benefits generated by start-up companies. These aspects are as important but are difficult to quantify. The ministry continues to explore options for measuring these aspects, and when suitable measures are identified, they will be included in future ministry service plans.

Results

Baseline	2004/05 Target	2004/05 Actual	2004/05 Variance
Data for 2001/02 fiscal year:	Maintain or increase.	Data for 2002/03 fiscal year (most recent data available):	
i. Licence/option agreements = 51 Ratio (#/$M) = 0.171		i. Licence/option agreements = 50 Ratio (#/$M) = 0.110	i. Target not achieved.
ii. U.S. patents issued = 38 Ratio (#/$M) = 0.127		ii. U.S. patents issued = 27 Ratio (#/$M) = 0.059	ii. Target not achieved.
iii. Start-up companies = 10 Ratio (#/$M) = 0.033		iii. Start-up companies = 17 Ratio (#/$M) = 0.037	iii. Achieved target.
iv. Licence income received = $12.6M Ratio ($/$M) = $42,012		iv. Licence income received = $13.8M Ratio ($/$M) = $30,203	iv. Target substantially achieved.

The results indicate that the number of start-up companies and the amount of licence income received were higher than in the baseline year, and that the number of licence/option agreements and U.S. patents issued were lower than in the baseline year.

There are a number of factors that may have had and impact on these results. For example, the baseline year may have been exceptional in terms of patent and licensing activity or the number of researchers applying for patents may have been down. With only three universities contributing to this activity, a small fluctuation in activity would result in a large percentage difference. For example, although patents were down by 28.9 per cent, this only represents a difference of 11 patents. The same logic applies to start-up companies, which increased by 70 per cent, but which only represents seven additional start-up companies.

The ratios are further affected by the number used as a denominator. Total research income for the three universities increased by an unusually large percentage (over 50 per cent) in 2002/03, likely due to an increase in the number of approvals of Canada Foundation for Innovation projects and the matching funding provided through the British Columbia Knowledge Development Fund and other sources. Consequently, in the case of licence income, even though the total increased, the ratio declined.

Objective 2: A relevant and responsive post-secondary system

Performance Measure 19: Number of student spaces in identified strategic skill programs

This measure indicates whether public post-secondary institutions in British Columbia were able to meet the FTE targets outlined in their 2004/05 budget and accountability letters in the following program areas: 1) computer science, electrical and computer engineering; 2) social/child protection worker; 3) registered nurse, licensed practical nurse, registered care aide and other allied health; and 4) medical school. This measure is calculated using end-of-fiscal-year audited enrolment reports submitted to the ministry by public post-secondary institutions, and is expressed as a total count of actual FTEs delivered and a ratio of actual to targeted FTEs, also known as a utilization rate.

Each program area captured by this measure trains students for occupations in fields with projected workforce shortages. Meeting demand for graduates trained in these occupations is a government priority, one that will help preserve our health care system and stimulate economic growth. To meet this demand, the ministry is working with institutions on ambitious strategies to substantially increase student FTEs in these programs.

Recent examples include the development of new combined major programs for some computer science, electrical and computer engineering programs involved in the Double the Opportunity (DTO) initiative. These programs have been developed in response to student and labour market demand. Other recent examples include the introduction of the Nurse Practitioner program at the University of British Columbia (UBC) and University of Victoria (UVic) in 2003/04 and the University of Northern British Columbia (UNBC) in 2005/06, and the Medical Expansion involving UBC, UVic and UNBC in the fall of 2004.

Results for this measure may be affected by changing labour market and student demand conditions, which institutions have little ability to control. These fluctuations can create challenges for institutions to meet their targets in some program areas. Other factors may include institution enrolment management policies and procedures, and administration practices in counting FTEs for these programs. The ministry continues to work with institutions on developing solutions to address future labour market shortages.

Results

Baseline	2004/05 Target	2004/05 Actual	2004/05 Variance
Data for 2001/02 fiscal year:		Data for 2004/05 fiscal year:	
i. Computer science, electrical and computer engineering programs: 4,659 targeted FTEs	i. 7,144 total FTEs	i. 6,331 actual FTEs 88.6% utilization rate	i. Target not achieved.
ii. Social/child protection worker programs: 976 targeted FTEs	ii. 1,035 total FTEs[2]	ii. 1,149 actual FTEs 111.0% utilization rate	ii. Exceeded target.
iii. RNs, LPNs, and RCAs and other allied health programs:[1] 8,393 targeted FTEs	iii. 10,914 FTEs	iii. 10,526 actual FTEs 96.4% utilization rate	iii. Target not achieved.
iv. Medical school programs: 488 targeted FTEs.	iv. 584 total FTEs.	iv. 586 actual FTEs 100.3% utilization rate.	iv. Achieved target.

[1] Registered Nurses (RNs), Licensed Practical Nurses (LPNs) and Registered Care Aides (RCAs).

[2] This target was rounded up by one FTE to 1,036 after the ministry's 2004/05 service plan was published.

The results for each component of this measure are described individually below followed by graphs showing their historical results.

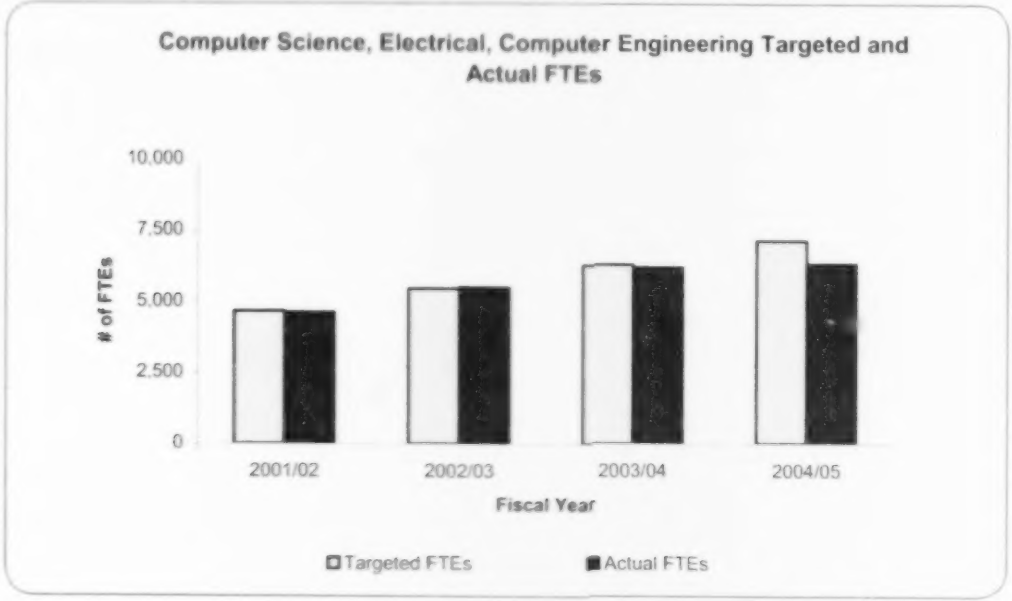
i. Computer science, electrical and computer engineering programs

Government's strategy to double (over five years beginning in 2002/03) the number of B.C. degree graduates in computer science, electrical and computer engineering will address expected labour market demand in these areas.

The targets were established on the basis of a joint proposal from The University Presidents' Council (TUPC) and the British Columbia Technology Industries Association, and subsequent discussions with TUPC, British Columbia Institute of Technology and individual university colleges. A total of 3,410 student FTEs are required to double the number of graduates (compared to 2001/02) in the targeted academic programs.

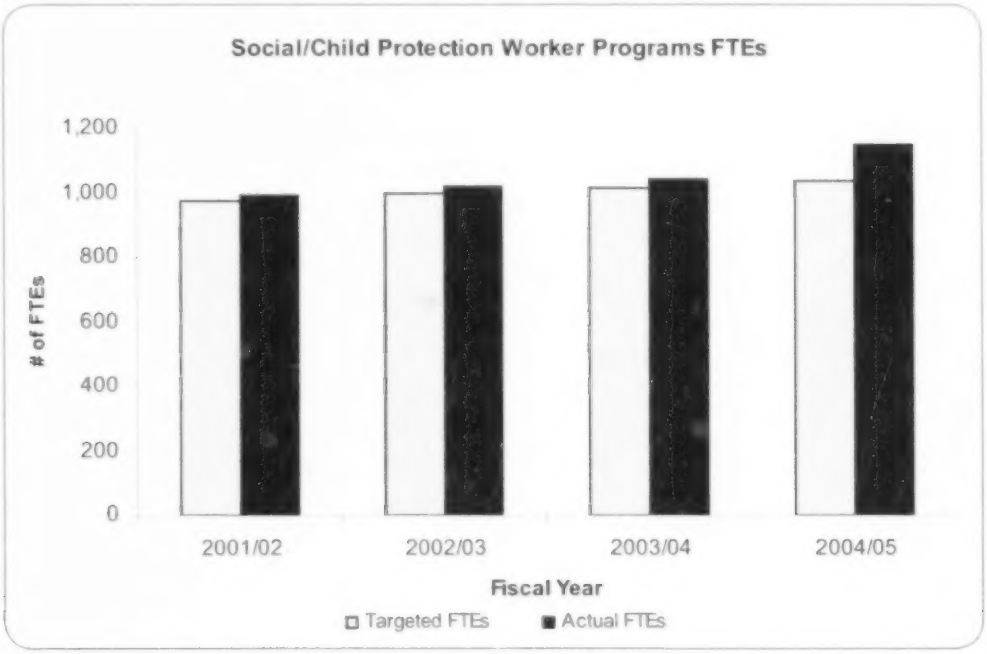
The results this year suggest that institutions are having difficulty meeting targets. Results are lower than expected, with an overall utilization rate of 88.6% (813 FTEs below the target of 7,144). The technology sector has seen labour market fluctuations in recent years, and this is a major contributing factor to the lower utilization rate. British Columbia is expected to see robust growth in the industry in the coming years and this will no doubt be reflected in increased utilization rates for DTO in the future.

The baseline and targets for this measure have been revised in the ministry's 2005/06 - 2007/08 service plan to reflect improved methods of defining and tracking students in DTO program areas.



ii. Social/child protection worker programs

Results indicate that the target was exceeded by 114 FTEs.



iii. RNs, LPNs, RCAs and other allied health programs.

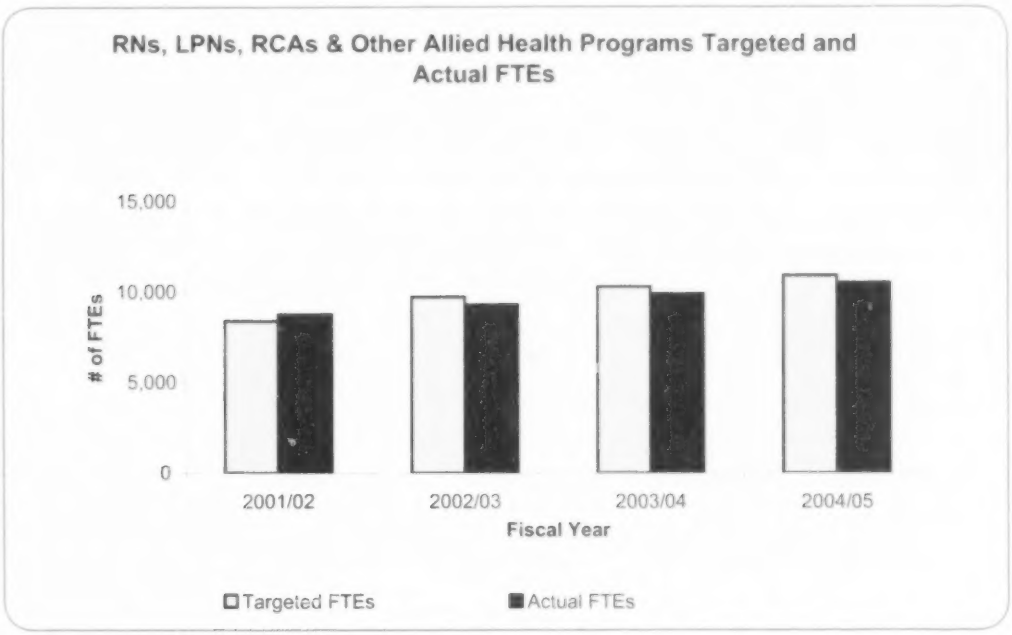
These targets were realistic and were based on what institutions could accommodate in terms of facilities, clinical FTEs, faculty and available budget. The results show that actual FTEs are lower than expected. Note that the utilization varies by program areas. Most nursing programs did very well with high utilization rates. The exception was Nursing Refresher where some institutions experienced lower utilization rates due to a decreased pool of qualified applicants.

There were shortfalls in allied health programs. Some institutions noted that new programs still ramping up to full capacity were under-producing as a result, but this is expected to improve once the programs are fully established. Student demand, which can be difficult to predict, and attrition, remain important factors in the underproduction in allied health programs.

Utilization was significantly lower than expected for residential care aide (RCA) programs due to uncertain labour market conditions for graduates and a resulting decrease in student demand. Attrition rates tend to be highly variable in RCA programs, making them difficult for institutions to predict.

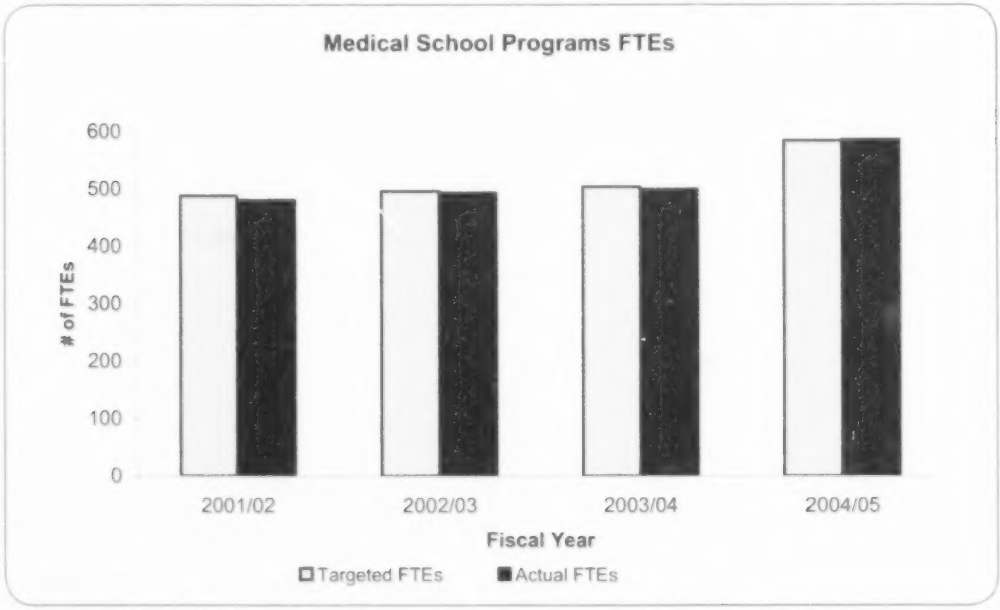
The ministry will be observing the trends in programs where targets were under-achieved and look for strategies that will assist institutions in meeting program targets that are in line with employer needs. The target has been decreased in the 2005/06 service plan because the

ministry was concerned that there was not enough capacity in the system to accommodate the growth originally estimated in the 2004/05 service plan.



iv. Medical school programs

The results indicate that the target for medical school programs was met.



Performance Measure 20: Number of trainees in industry training

The Industry Training Authority (ITA) was established in 2004 to oversee the industry training system in B.C. and to increase the number of trainees in industry training by 30 per cent by 2006/07.

To support this goal the ITA developed and implemented the Accelerated Credit Enrolment in Industry Training (ACE IT) program, which allows high school students to earn credit simultaneously toward high school graduation and the technical training component of an industry training program. In addition to ACE IT, new industry training programs have been approved in response to proposals from the construction industry, including: Residential Construction Framing Technician, Construction Formwork Technician, and Reinforcement Steel Installer.

The ITA maintains B.C.'s commitment to the inter-provincial Red Seal program, and ensures that new programs meet and are linked to Red Seal national standards. The ITA has also introduced new industry training policies, including an expanded definition of who can sponsor an apprentice and a clear process for challenging exams and obtaining credit for prior experience — both designed to create flexibility and make it easier for trainees/apprentices to complete their industry training requirements.

This measure indicates whether the ITA was able to meet a targeted increase in the number of participants in industry training programs, as outlined in its 2004/05 budget and accountability letter.

Interpreting results for this measure is complicated by the fact that it draws on two data sources with different data collection schedules. The measure is calculated using data from the Apprenticeship Information Management System (AIMS), which is maintained by the ITA, and the Central Data Warehouse (CDW), which is administered by the ministry. This data reflects industry training agreements registered with the ITA through the AIMS system and course registration in entry level trades training programs at public post-secondary institutions.

Results

Baseline	2004/05 Target	2004/05 Actual	2004/05 Variance
25,479 (includes 14,676 registered trainees and 10,803 entry level trades participants).[1, 2]	Increase by 1,200 trainees.	Increased by 5,374 trainees to 30,853 (includes 20,050 registered trainees and 10,803 entry level trades participants).	Achieved target.[3]

[1] Baseline reflects the number of registered trainees as at March 31, 2004, and the number of entry level trades training (ELTT) participants for the 2003/04 academic year.

[2] The baseline for this measure was increased based on improved verification of data.

[3] The increase reflects only an increase in registered trainees; the number of ELTT participants is based on 2003/04 academic year data because data for the 2004/05 academic year will not be available until after November 2005. Some ELTT students move directly to apprenticeship and will be counted in both figures; this applies to both the baseline and the performance result.

The results suggest an increase of 5,374 above the baseline, well in excess of the target. However, for the reasons identified, these results may be overstated.

Performance Measure 21: Student assessment of usefulness of knowledge and skills in performing job

For many people, a primary reason for pursuing post-secondary education is to enhance their employability with the hope that it will lead to a fulfilling career. It is, therefore, important for the ministry and post-secondary institutions to ensure that education programs impart knowledge and skills that students will need once they enter the labour market.

Institutions are responsible for developing, evaluating and revising the content of their instructional programs. As a part of these processes, institutions maintain ongoing links to industry and employers in order to ensure that, where appropriate, programs provide students with knowledge and skills relevant to the needs of employers and entrepreneurs in a modern economy.

This measure provides an indication of the relevance of the public post-secondary system to the labour market from the perspective of former students. As the recipients of post-secondary education, former students are well-suited to comment on its relevance to their employment. This measure is the percentage of former students who, when surveyed, indicated that the knowledge and skills they acquired through their education was very useful or somewhat useful in performing their job. It is based on data obtained through annual student outcomes surveys. Results for this measure include responses from all who were employed when surveyed regardless of whether their employment was related to their education. Responses from those not employed, however, were excluded.

Results

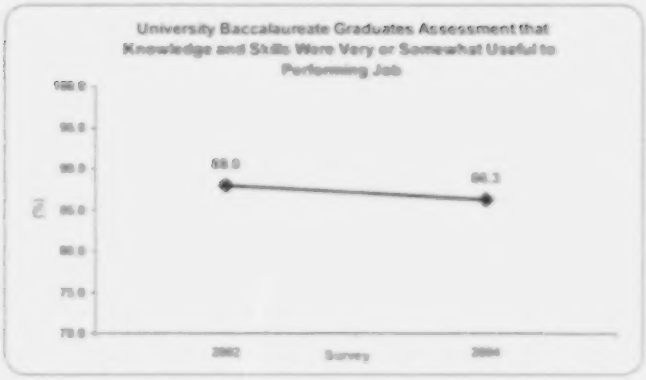
Baseline	2004/05 Target	2004/05 Actual	2004/05 Variance
77.2% of former college, university college and institute students found the knowledge and skills they acquired from their studies very or somewhat useful in performing their job (2002 survey).	Maintain a high level of student assessment (benchmark = 90%) or demonstrate performance improvement over time.	76.5% (college, university college and institute 2004 survey)	Target not achieved.
88.0% of university baccalaureate graduates found the knowledge, skills and abilities they acquired from university to be very or somewhat useful in work (2002 survey).		86.3% (university 2004 survey).	

The results indicate that the target was not achieved on the basis that the benchmark was not equalled or exceeded, and there was no demonstrated improvement over time. For former college, university college and institute students, the margin of error is too large to calculate a meaningful trend line, and the apparent increase in performance between the 2003 and 2004 surveys is not statistically significant. The decrease in performance for the university sector reflects an increase in the number of graduates employed in occupations not directly related to their education at time of survey. Former students employed in occupations unrelated to their field of study will indicate that their education was less directly useful than those employed in related occupations.

Historical data for this measure are provided below.

Historical Data[1]

Survey Year	Colleges, University Colleges & Institutes	Universities
	%	%
2002	77.2	88.0
2003	75.4	n/a[2]
2004	76.5	86.3



[1] Due to the small sample size for the 2002 and 2003 data for colleges, university colleges and institutes, the margin of error is too large to calculate a meaningful trend line.

[2] University data for 2003 is not applicable because it was based on graduates five years after graduation rather than two years after graduation.

Performance Measure 22: Student outcomes — unemployment rate

As discussed in the text for Performance Measure 21, many people pursue post-secondary education to enhance their employability with the hope that it will lead to a fulfilling career, so it is important that the education students receive is relevant to the labour market.

This measure provides some indication of how successful former students were in making the transition from post-secondary education to employment. As such, it reflects to some extent the relevance of their education to the needs of the economy. It compares the percentage of university graduates and former college, university college and institute students who were unemployed when surveyed to the unemployment rate for British Columbians with high school credentials or less. It is based on data obtained through annual student outcomes surveys and the Statistics Canada Labour Force Survey (LFS).

Results for this measure will be affected by a number of factors beyond the relevance or quality of education students received, including general economic conditions, geography (regional variations in employment), demographics (characteristics of student), and type of education program taken. Variations in unemployment rates over time are at least as likely to be influenced by general economic conditions as they are by the relevance or quality of education former students received. Nonetheless, it is widely accepted that post-secondary education influences to some extent a person's ability to obtain and maintain employment. Statistics Canada LFS data clearly show that unemployment rates for people with post-secondary education are significantly lower than for people without post-secondary education. In addition, research suggests that while individuals with post-secondary education are susceptible to changes in general economic conditions, they may experience the effects of such changes differently than individuals without post-secondary education.

Results

Baseline	2004/05 Target	2004/05 Actual	2004/05 Variance
9.1% of former college, university college and institute students were unemployed at time of survey (2003 survey). 5.8% of university baccalaureate graduates were unemployed at time of survey (2002 survey).	Maintain unemployment rate for former B.C. post-secondary students below rate for persons with only high school credentials or less.	8.7% (college, university college and institute, 2004 survey). 5.3% (university, 2004 survey).	Achieved target.

The unemployment rate in 2004 for British Columbians aged 18-29 was 12.2 per cent. Therefore, the results indicate that university graduates and former college, university college and institute students continue to have lower unemployment rates than persons with only high school credentials or less.

Unemployment Rates

Baseline	2002 Survey (%)	2003 Survey (%)	2004 Survey (%)
B.C. Population (18-29 years, LFS)	11.3	10.9	9.3
B.C. Population with High School or less (18-29 years, LFS)	15.1	14.8	12.2
College, University College, and Institute Former Students	9.0	9.1	8.7
University Baccalaureate Graduates	5.8	n/a[1]	5.3

[1] The 2003 University Baccalaureate Graduate Survey data were based on students who graduated in 1998. It is inappropriate to compare employment outcomes of students who graduated two years ago with students who graduated five years ago.

Goal 3: Responsive and effective management

Core Business Areas: Student Financial Assistance Programs; and Executive and Support Services

Objective 1: Ministry business practices are efficient and effective

Performance Measure 23: Student aid application turnaround time

The British Columbia Student Assistance Program (BCSAP) improves access to post-secondary education by helping eligible students manage the costs associated with their education. A BCSAP application is a one-stop process for students to apply for financial assistance through a variety of loans and grants made available by the provincial and federal governments and the Canada Millennium Scholarship Foundation. In the 2003/04 academic year, over 97,000 BCSAP applications were processed.

A challenge for the ministry in administering BCSAP is providing students with a timely response to their applications. Over the past several years the introduction and expansion of the online application has been a huge advance in reducing application turnaround time. The online application eliminates data entry requirements, thereby reducing the time required to process an application. It also eliminates missing information, reducing requests for missing information.

This measure reflects the results of ministry efforts to improve efficiency by reducing application turnaround time. It is the number of working days required to process student loan applications, and is calculated from internal ministry data.

It is important to note that only *complete* applications are used in this calculation. Delays due to incomplete information are not included.

Results

Baseline	2004/05 Target	2004/05 Actual	2004/05 Variance
2002/03 fiscal year: 17 working day application processing time.	Reduce to 12 working days.	10 working days.	Exceeded target.

The results indicate that the time required to process complete applications has reduced, suggesting greater efficiency in one aspect of ministry business practices.

Some applications exceeded the 10 working day processing time during the summer peak period, but the large majority of applications were processed within 10 days.

Performance Measure 24: Ministry program management as a percentage of overall ministry spending

In recent years, the ministry has restructured its internal organization in a number of ways to improve efficiency and sharpen the focus on core business. This measure provides one perspective on the success of these efforts. It compares the ministry's total program management costs to the ministry's total operating costs. Results are calculated using internal ministry data.

One potential risk associated with this measure is that changes in negotiated wage settlements and external charges may affect results.

Results

Baseline	2004/05 Target	2004/05 Actual	2004/05 Variance
Data for 2002/03 fiscal year: 1.24%.	Maintain or reduce.	Data for 2004/05 fiscal year: 1.06%, a reduction of 0.18 percentage points from the baseline.	Achieved target.

The results indicate efficiency in administering ministry programs.

Since this measure focuses exclusively on internal administrative matters with little public relevance, this measure has not been included in the ministry's 2005/06–2007/08 service plan. The ministry will continue to track results for this measure and will use them to help guide internal operational planning decisions.

Objective 2: The ministry provides leadership to the post-secondary system and ensures accountability

Performance Measure 25: Per cent of colleges, university colleges and institutes meeting established thresholds for accuracy, timeliness and completeness

This measure provides one indication of accountability in the public post-secondary system: the percentage of institutions that report the required data in a timely, accurate and complete manner.

The Post-Secondary Central Data Warehouse (CDW) is housed in the ministry and contains standardized student-level data submitted by 22 public institutions. Data submissions are made twice annually: June 30 and November 30.

In October 2002, the ministry implemented a Data Quality Management Plan (DQMP) to ensure that the quality of the data is sufficient for research analysis and decision-making purposes, and to satisfy accountability requirements. Under the DQMP, the ministry established thresholds concerning the timeliness, accuracy and completeness of data submissions. This measure is the percentage of institutions meeting these thresholds on their November data submission.

Results

Baseline	2004/05 Target	2004/05 Actual	2004/05 Variance
82% of institutions met thresholds for accuracy, timeliness and achieved at least 90% completeness on all data elements in the Data Quality Management Plan (DQMP).[1]	90% of institutions to meet thresholds for accuracy, timeliness and 99% completeness on elements in the DQMP.	95% (21 institutions) submitted data on or within 2 days of the target. 100% of institutions completed the requirements for accuracy. 45% (12 institutions) completely satisfied the required thresholds for completeness. Of the remaining 10 institutions, the majority missed 1 or 2 of the established thresholds for completeness by small margins.[2]	Target substantially achieved.

[1] Baseline reflects performance for the data submission due November 30, 2002.

[2] 2004/05 actuals reflects performance for the data submission due November 30, 2004.

The results indicate a significant improvement in the overall quality of the CDW data submissions. The thresholds for timeliness and accuracy have been achieved on a consistent basis. Although four of the 18 thresholds for completeness were not achieved, they were missed by only small margins. The institutions have undertaken continuous improvements in their business practices and policies to achieve these results.

Since this measure focuses exclusively on internal administrative matters with little public relevance, this measure has not been included in the ministry's 2005/06 – 2007/08 service plan. The ministry will continue to track results for this measure and will use them to help guide internal operational planning decisions.

Deregulation

Limiting "red tape" and the regulatory burden in B.C. is a government priority. The intended outcome of doing so is to boost efficiency, reduce costs and stimulate innovation.

To contribute to this outcome, the ministry included in the 2004/05 – 2006/07 service plan a commitment to reduce its total number of regulatory requirements to 1,241 in 2004/05, down from 1,861 in June 2001. By June 2004, the ministry had met and slightly exceeded this commitment, reducing its total number of regulatory requirements to 1,232.

Report on Resources

Resource Summary: Ministry

Introductory Comments

For the 2004/05 fiscal year, the Ministry of Advanced Education spent less than its budget. Savings were generated by higher-than-expected BC Student Loan interest recoveries, increased sinking fund earnings and lower-than-expected interest rates. The majority of these savings were redirected to the province's public post-secondary institutions.

Please note that the figures presented in the "Variance" column are calculated as "Actual" minus "Total Estimated." This presentation is consistent with that reported in the 2004/05 Public Accounts.

	Estimated[1]	Other Authorizations[2]	Total Estimated	Actual	Variance (Actual minus Total Estimated)[3]
Operating Expenses ($000)					
Educational Institutions and Organizations	1,419,138	10,000	1,429,138	1,464,098	34,960
Industry Training and Apprenticeship	77,281	—	77,281	77,881	600
Student Financial Assistance Programs	136,291	—	136,291	111,169	(25,122)
Debt Service Costs and Amortization of Prepaid Capital Advances	246,750	—	246,750	235,013	(11,737)
Executive and Support Services	19,389	—	19,389	20,218	829
Total	**1,898,849**	**10,000**	**1,908,849**	**1,908,379**	**(470)**
Full-time Equivalents (Direct FTEs)					
Executive and Support Services	**217**	**—**	**217**	**203**	**(14)**

[1] The amounts in this column correspond to the *Estimates* as presented to the legislative assembly on February 17, 2004.

[2] "Other Appropriations" include Supplementary Estimates #8.

[3] The Variance display convention has been changed this year to be consistent with the change introduced in the Public Accounts. Variance represents "Actual" minus "Total Estimated." If the Actual is greater than the Total Estimated, the Variance will be displayed as a positive number.

	Estimated[1]	Other Authorizations[2]	Total Estimated	Actual	Variance (Actual minus Total Estimated)[3]
Ministry Capital Expenditures (Consolidated Revenue Fund) ($000)					
Executive and Support Services					
Information Systems	2,455	—	2,455	327	(2,128)
Furniture and Equipment	350	—	350	24	(326)
Tenant Improvements	1,300	—	1,300	0	(1,300)
Total	**4,105**	**—**	**4,105**	**351**	**(3,754)[4]**
Capital Plan ($000)[3]					
Educational Institutions and Organizations					
Prepaid Capital Advances	215,400	—	215,400	199,286	(16,114)
Other Financing Transactions ($000)					
Student Financial Assistance Programs – BC Student Loan Program					
Total Receipts	**13,600**	**—**	**13,600**	**37,024**	**(23,424)**
Total Disbursements	**279,400**	**—**	**279,400**	**204,167**	**(75,233)**
Total Net Cash Source (Requirements)	**(265,800)**	**—**	**(265,800)**	**(167,143)**	**(98,657)**

[1] The amounts in this column correspond to the *Estimates* as presented to the legislative assembly on February 17, 2004.

[2] "Other Appropriations" include Supplementary Estimates #8.

[3] The Variance display convention has been changed this year to be consistent with the change introduced in the Public Accounts. Variance represents "Actual" minus "Total Estimated." If the Actual is greater than the Total Estimated, the Variance will be displayed as a positive number.

[4] Capital Expenditures on systems development, tenant improvements, and office furniture and equipment was significantly below budget due to reduced transition capital costs for the Centre for Education Information Standards and Services, revised systems priorities and tenant improvement costs that were charged to the Ministry of Education.

Capital Expenditures and Financing Transactions

Prepaid capital advances are funds provided to public post-secondary institutions for approved capital costs of new buildings, renovations, improvements, equipment and capital leases. These expenses support the ministry's goals for a top-notch post-secondary system.

Under the Student Financial Assistance Programs, receipts represent the principal repayments on outstanding loans and disbursements represent loans provided to students. These transactions support the ministry's goals for economic and social development and responsive and effective management.

Resource Summary: Public Post-Secondary Institutions

For the 2004/05 fiscal year, public post secondary institutions' actual revenues and expenditures exceeded budget projections. Increased revenues are due to greater than projected tuition fee revenues, government contributions and increases in recognition of deferred contributions. The additional revenues allowed institutions to increase the number of student FTEs and fund programs previously delivered directly by the health care sector.

Public Post-Secondary Institutions	2004/05 Budget	2004/05 Actual	Variance (Actual minus Budget)
2004/05 Combined Income Statement ($000)			
Total Revenue	3,269,000	3,558,000	289,000
Total Expense	3,260,000	3,418,000	158,000
Operating Results	9,000	140,000	131,000
Gain (Loss) on sale of Capital Assets	0,000	0,000	0,000
Net Results	**9,000**	**140,000**	**131,000**

Appendix 1: Student Outcomes Surveys in British Columbia

The following is a brief discussion about student outcomes surveys in British Columbia, the results from which are utilized for several performance measures identified in this report (i.e., Performance Measures 12, 14, 15, 16, 21 and 22).

Student outcomes surveys have been undertaken for the university college, college and institute sector since 1988 and for the university sector since 1995. These telephone surveys provide data about a number of things, including various aspects of the former students' post-secondary education experience, further education undertaken, labour market experience (employment outcomes), etc. A sample of former college, university college and institute students are surveyed annually, between nine months and 20 months after completion (or near completion) of their education program. A sample of university baccalaureate graduates are surveyed annually, two years and five years after graduation (i.e., the 2004, 2002 and 2000 surveys focused on graduates two years after graduation, whereas the 2003 and 2001 surveys focused on graduates five years after graduation). To avoid comparing graduates two years after graduation with graduates five years after graduation, only the results of the two year out surveys in 2004, 2002 and 2000 are utilized in this report.

By their nature, all surveys are subject to potential error due to sampling, questionnaire design and response bias. The amount of potential error (i.e., margin of error) in any survey result is estimated based on the level of confidence that the sample result accurately reflects what the true result would have been if the entire target population had been surveyed. For most performance measures that utilize student outcomes survey data, the margin of error is less than one per cent at the 95 per cent confidence level; in other words, the ministry is 95 per cent confident that the results of the sample survey are less than one per cent different from what the true result would have been if the entire target population had been surveyed. Consequently, the ministry believes the results of the student outcomes surveys are a reliable basis for performance measurement.

For some of the performance measures that utilize student outcomes survey data, the baselines identified in this report are different from the baselines identified in the 2004/05 – 2006/07 service plan. These baseline revisions, which were first identified in the 2005/06 – 2007/08 service plan, were made to facilitate the trend line analysis required for determining whether the targets were achieved, and to improve consistency with other measures, many of which have the 2001/02 (fiscal or academic) year as their baseline. The general principle for the revisions was to establish the baselines using the most recent survey data available in the 2001/02 year. For the surveys of former college, university college and institute students, the baselines were revised to reflect results of the 2001 survey (or the 2002 survey, if there was no result from the 2001 survey). For the surveys of

university baccalaureate graduates, the baselines were revised to reflect results of the 2000 survey (or the 2002 survey, if there was no result from the 2000 survey).

For most of the performance measures that utilize student outcomes survey data, the 2004/05 target was to "maintain high level of satisfaction or student assessment (benchmark level of 85 or 90 per cent), or demonstrate performance improvement over time." Demonstrated performance improvement over time is generally reflected by an inclined or horizontal trend line over the period between the baseline and the most recent year. For those measures where a valid trend line has not yet been established, demonstrated performance improvement over time is reflected by a statistically significant increase in the data between the two most recent surveys (i.e., between 2003 and 2004 surveys for former students of the colleges, university colleges and institutes, and between 2002 and 2004 surveys for the university baccalaureate graduates).